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## **Correction to YAS Occasional Paper 6**

*Patterns of Quern Production, Aquisition and Deposition. A Corpus of Beehive Querns from Northern Yorkshire and Southern Durham* (2008) By D. H. Heslop

Although in the acknowledgements (p. xi) Geoff Gaunt is credited with geological matters he points out that he is not responsible for the geological content and that this credit should go elsewhere.



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## NOTES ON CONTRIBUTORS TO VOLUME 81

**Brian Barber** was an archivist with the West Yorkshire Archive Service and subsequently senior, then principal, archivist at Doncaster Archives up to his retirement in 2006. A research student of the late Professor M. W. Beresford and subsequently his research assistant, in 1979 he the principal author of the official history of the West Riding County Council. In 2007 his History of Doncaster was published, and he has also written articles and contributions for histories of Darlington, Doncaster, Leeds, Sheffield and Wakefield and also for the Oxford Dictionary of National Biography.

**Keith Boughey** is a retired secondary school science teacher living in Baildon, West Yorkshire. He has been involved in archaeology as an amateur for over thirty years with a special interest in the prehistoric rock art of the county, being the co-author of *The Carved Rocks on Rombalds Moor* (1986) and with Edward Vickerman of *The Prehistoric Rock Art of the West Riding* (2003). A member of the Prehistory Society and of the Yorkshire Archaeological Society, he is currently the editor of their Prehistory Research Section Bulletin and the Director of the Stanbury Hill Community Archaeology Project, investigating a Late Neolithic/Early Bronze Age landscape on Bingley Moor.

**Dr Carolyn Chenery** is a member of the Archaeological Science Research Group at the University of Reading.

**David Cross** has degrees in American Studies (Dundee) and US Politics (Essex). Having researched American History at Glasgow, and worked as an archivist for business records, he spent twenty years as a project manager with BT and eight years as an administrator at Huddersfield University. In 2007 he graduated with an MA in History (part-time) from Huddersfield, and is currently employed occasionally and is working towards a PhD in mining history at Sheffield Hallam University.

**Linzi Harvey** is a Post-Excavation Assistant at ARCUS, University of Sheffield.

**Lee Hyland** is a graduate of the University of Hull with a PhD in Chemistry, then later a BA in Archaeology. He has spent the last 12 years teaching science in secondary schools in Hull and East Yorkshire. His interest in the Roman archaeology of Holderness comes from the work undertaken as part of the degree.

**Christopher Ridgway** has been curator at Castle Howard since 1985. He is a graduate in English and Related Literature from the University of York, and has held a Honorary Visiting Fellow in the department of Archaeology.

**Ian Roberts** is Principal Archaeologist with Archaeological Services WYAS. Ian is a Fellow of the Society of Antiquaries.



**Gavin Robinson** holds an MA in prehistoric archaeology from the University of Durham and works as a project officer for Northern Archaeological Associates Ltd. He has supervised a wide variety of fieldwork projects throughout Yorkshire and elsewhere in Britain.

**Sara Slinn** works at the Borthwick Institute for Archives, University of York. She edited Borthwick List and Index no.28 on *York Clergy Ordinations, 1800-1849* and is currently working on late eighteenth and nineteenth-century clerical careers in the diocese of York.

**Brian Stevenson**, following National Service, worked in the 1950s and early 1960s at the family firm of W. Stevenson and Son, Bookbinders and Manufacturing Stationers. He attended Leeds College of Technology in the 1950s, where he qualified as a bookbinder; attended the James Graham College of Education at Farnley in the mid-1960s; and graduated with a BA from the Open University in the 1970s. Having taught at schools in both Bradford and Leeds, he is now retired.

**Harold Taylor** read Geography at Cambridge and then became a teacher. Since retirement, membership of the South Yorkshire Industrial History Society has led his research activity, especially in the Barnsley area. He published on hand-made nail forges in YAJ (1991) and other studies have appeared in several volumes of Aspects of Barnsley. Most recently he has been researching the handloom weaving community of Barnsley in the mid-nineteenth century.

**Allen Warren** is a Senior Lecture in the Department of History at the University of York, a past Head of Department, and was Provost of Vanbrugh College for 24 years until his retirement in 2008. His main research interests are British and Irish history in the nineteenth century and Youth Movements, 1880-1970.

**Quentin Harcourt Wilson** is an Anglican priest currently serving as Rural Dean of Southern Ryedale after a varied ministry culminating in five years as Rector of Burnley. He is currently researching into the life and contribution of the Revd Dr Richard Conyers (1725-1786), a prominent Yorkshire evangelical and contemporary of the Wesley brothers. His doctorate at the University of York was on The Literary Remains of Charles Howard, Third Earl of Carlisle, 1669-1738.

**Rita Wood** is continuing her research in English Romanesque sculpture. A field-worker for the *Corpus of Romanesque Sculpture in Britain and Ireland*, she is now working in the East Riding.

# MESOLITHIC SITES ON KEIGHLEY AND OXENHOPE MOORS: THE LOCAL LITHIC COLLECTIONS OF STUART W. FEATHER

By Keith Boughey

*Stuart W. Feather (1927-2002), founder and former curator of Bradford Industrial Museum, was in his private time an avid collector of prehistoric material for almost half a century, during which he amassed an impressive lithic collection off the local moorlands surrounding his home town of Keighley in West Yorkshire. Through the kindness of his widow, what remains of this collection was recently passed to the author and others for analysis. The vast majority of this lithic material is later Mesolithic, including characteristic 'Narrow Blade' tools, and following on from the work of previous authors and collectors, such as Crowther, Turner and Gilks, adds considerably to our knowledge of Mesolithic activity in this part of the Pennines.*

## BIOGRAPHY

Stuart Wharton Feather (Fig. 1) was born in Keighley, West Yorkshire, on 27 August 1927 and lived there for the whole of his life, apart from the five years he was at boarding school and his two years compulsory National Service. He attended the local primary school at Ingrow until the age of eleven, when he became a pupil at Woodhouse Grove School, Apperley Bridge, near Bradford. He was an only child and, sadly, his mother died when he was only nine years old.

Feather always claimed that it was his grandfather, Holmes Feather, who had encouraged him in his early interest in archaeology and collecting, and when he was a schoolboy he had a small museum of assorted exhibits in a bedroom at his home, complete with a visitors' book.

He left Woodhouse Grove School with very good School Certificate results and for a short time worked at Keighley Laboratories. Then he joined his mother's family's building contracting business, established in the 1890s, from where he was called up for National Service in the RAF. He was posted to India and later fortunately to Egypt, where his underlying interest in archaeology was inevitably rekindled with visits to many of the famous antiquities, including sites in the Valley of the Kings.

On return to the UK after National Service, Feather worked part-time during the 1950s for the Ordnance Survey as an unpaid recorder, plotting onto 6 inch to the mile maps every archaeological or historical site and find-spot for miles in and around the Keighley area. Typically, Feather was immensely thorough in the task, recording sites and finds ranging from Mesolithic flint workshops, Neolithic axes, Late Neolithic carved rocks, Bronze Age burial cairns and Iron Age quern stones, to Roman coins, medieval boundary stones, disused kilns and quarries, deserted farmsteads and





Fig. 1 Stuart Wharton Feather 1927 - 2002

windmill bases - maps which still provide a rich and invaluable source of information for anyone wishing to make a serious study of any period in the area.

In 1958, he published the results of his research into 'Weecher circle' (Feather 1958), believed by Raistrick to have been an authentic Bronze Age stone circle on the south-eastern flank of Rombalds Moor first recorded by the antiquarians, Preston and Speight in 1891 (Gray 1891, 153), and destroyed when Weecher reservoir was built to supply water to the nearby town of Baildon the following year (Raistrick 1929, 358). Feather's work confirmed its former existence in the fields to the south of the reservoir but the state of the monument even in Preston's time was insufficient to tell whether it had been a genuine circle or an example of a typical Early Bronze Age Pennine ring cairn.



Meanwhile, Feather had returned to the family business but his heart was not really in it and when the opportunity arose in 1965 to work as Assistant Keeper under Sidney Jackson at Cartwright Memorial Hall Museum in Bradford, he jumped at the chance. Feather had been a member of the Yorkshire Archaeological Society from the late 1940s and had joined the Cartwright Memorial Hall Archaeology Group in the early 1950s where he was first introduced to Jackson, the Keeper of the Museum (Fig. 2). Jackson used to take summer rambles with the group and in 1956 Feather went on one of these rambles to see cup-and-ring-marked rocks for the first time on Baildon Moor, from when his great interest in the subject began. He subsequently went on to search large areas of the north of England, discovering many previously unknown cup-and-ring-marked rocks on the uplands of the Wharfe and Aire Valleys, in County Durham, and was the first to recognise their presence on the North York Moors. Many of his findings were published in either the *Bradford Cartwright Memorial Hall Archaeology Group Bulletin* (edited by Jackson) or in the (now defunct) *Yorkshire Archaeological Register* of the time. Further, he kept an extensive photographic record of sites running to over 2000, which, after careful cataloguing



Fig. 2 Members of the Bradford Cartwright Hall Archaeology Group  
(taken in the grounds of Tatefield Hall, Beckwithshaw, nr. Harrogate, 15 September 1959)  
from left to right

1: Frank Brock; 2: Joe Davies; 3: Colin Aersley?; 4: B.J.W. Kent; 5: Jim Reid;  
6: F. Maurice Greaves; 7: Ted Farrar; 8: Ken Warren; 9: Norman (N.T.) Wilson;  
10: Denis Laycock; 11: Paul Robertshaw; 12: Sidney Jackson (seated); 13: Stuart W. Feather



by the current author, has now been deposited along with much of his other personal archaeological archive at the Manor House Museum in Ilkley. Both Boughey and Vickerman (Boughey and Vickerman 2003) and later, Brown and Chappell (Brown and Chappell 2005), in their publications on the prehistoric rock art of the former West Riding and the North Yorks Moors respectively began by making clear their considerable debt to his earlier research, and he was also acknowledged as an important source of local knowledge by Beckensall and Laurie in their work on the prehistoric rock art of County Durham (Beckensall and Laurie 1998).

Feather corresponded with Ronald Morris, the retired Scottish solicitor and archaeologist who was the first amateur researcher in the modern period to revive interest in prehistoric rock art in the UK, and in the early 1960s took him onto Ilkley Moor to see some of the cup-and-ring-marked rocks there. He was also in contact with Eric Cowling of Otley, the author of *Rombalds Way: a Prehistory of Mid-Wharfedale*. Another of his interests was in the remains of the Yorkshire lead-mining industry, particularly in Wharfedale and Swaledale, recorded through a series of several hundred photographs as well as notes in his personal diaries, and he was a close friend of Robert T. Clough, author of a major book on the history of lead mining in the Dales (Clough 1962). He made an extensive collection of black and white photographs of derelict lead workings.

Feather also made an impressive collection of Neolithic stone axe rough-outs from most of the major axe-factories in the British Isles: Langdale in Cumbria, Mynnyd Rhiw and Gareg Fawr in N. Wales, and Tievebulliagh in N. Ireland. With help, advice and interpretation from Vin Davis of the IPG (Implement Petrology Group) these have now been dispersed to their respective local or national museums for the proper curation. He was also an avid and long-term collector of prehistoric lithic tools and waste, much of it from the local moors around his home in Keighley, in particular on Oxenhope Moor, where he recognised several new Mesolithic sites or 'workshops'. Even more impressively, he collected huge quantities of Mesolithic flint tools, flakes and waste off the Carrs S of Scarborough (weighing some 188kg in all), including from around the famous Mesolithic site of Star Carr, and alone gathered together the largest single collection of Mesolithic flint axes (13 axes in all, mostly of the characteristic tranchet type) to have been found in the area (Boughey 2008).

In 1970, he published a joint paper with Terry Manby on the Neolithic chambered tombs of the Pennines (Feather and Manby 1970), including a reference to the long barrow on Black Hill above Bradley, the main excavation details of which were first published by Raistrick (Raistrick 1931, 252-5) and later described by Cowling (Cowling 1946, 33-4).

Throughout his life Feather was a very keen walker - on the mountains and in the countryside, usually incorporating something archaeological along the way. Other interests were photography and railways, and in 1955 he took a three-year W.E.A. course in Geology under Professor Versey of Leeds University.

After he started work at Cartwright Memorial Hall Museum, he sat the Museums Association examinations and became an Associate Member with Speciality in Archaeology. He was invited to speak on the subject of archaeology at the meetings of

various societies and was tutor at three 'Archaeology Week Holidays' organised by Cartwright Memorial Hall, two at Barton-on-Sea on the south coast and one at Barmouth in Wales, when visits were made to famous archaeological sites in their respective areas. He was also tutor at evening classes in Bingley and Bradford, and worked on the identification and conservation of flints at Bradford University.

In 1970, when Bradford Metropolitan District Council decided they should have an Industrial Museum, the disused Moorside Mill at Eccleshill was purchased and Feather was put in charge of setting-up the Museum totally from scratch. Industrial archaeology was a new challenge for him and he typically set about the task with great energy and enthusiasm, going to mill sales, and visiting firms and people who gifted items for the Museum. The Museum officially opened on 14 December 1974 with Feather as its first Curator and now stands as a well-established and fitting record of Bradford's rich and unique industrial heritage in textiles and light engineering. Feather remained Curator until his early retirement due to ill health in December 1985. Fortunately, he retired at the right time and after a period of recuperation his health improved and he was able to enjoy a happy and well-earned retirement. He died on 29 August 2002 after a short illness, leaving behind a considerable archaeological legacy based on a lifetime's collecting: the present paper addresses itself to just a small part of it.

## LITHIC SITES

Feather's archaeological collecting covered a wide range of periods and regions of the UK, but this particular paper concentrates on his extensive collection of worked Mesolithic lithic artefacts and debitage from the local moors on the eastern flank of the Pennines that lay within a short distance to the west and south of his family home



Fig. 3 Location of Keighley and Oxenhope Moors within the UK



Fig. 4 Location map of Keighley and Oxenhope Moors



in Keighley, in particular Keighley and Oxenhope Moors (Figs. 3 and 4) and any immediately adjoining moorland. By far the bulk of his collecting, both in terms of the number of visits made and the number of lithics collected, came from these two close stretches of moorland, though his collecting of lithics covered other local areas too (see Table 1).

As is now customary and correct, the term 'lithic' is used to refer to the pieces in general as they are composed of both flint and its poorer quality alternative, chert. The term 'flint' is therefore used exclusively to refer to pieces made specifically of flint. The word 'site' is to be understood generically, i.e. as a specific location within which one or more pieces were discovered, ranging from single pieces that possibly represent an individual random loss in antiquity through to dense concentrations of high numbers of lithics indicating a lithic workshop or something similar. None of the finds were discovered by deep excavation into the peat: they were all either surface finds or found only a few centimetres below the present surface. The main areas covered and collecting sites referred to in the present paper are shown on the maps below (Figs. 5-12) and Table 1, and analysed in Tables 3-6.

## LOCAL AREAS OF COLLECTION

Feather's lithic collecting covers 115 individually identified sites, for the purposes of analysis and discussion divided up as follows. Only sites from Areas 1 and 3 are treated in the present paper - a total of seventy-six sites representing well over half of Feather's collection.

### Area 1. Pennines west of Keighley

Boulsworth Hill, Bradley Moor, Onion Bank, Combe Hill, Ickornshaw Moor, Stanbury Moor, Keighley Moor, Oakworth Moor

Sites 1-22

### Area 2. Grassington

Sites 23-6

### Area 3. Pennines south-west of Keighley

Oxenhope Moor, Branshaw, Harden Moor, Manywells

Sites 27-80

### Area 4. Rombalds Moor

Sites 81-98

### Area 5. Wharfedale North

Appletreewick Moor, Barden Fell, Middleton Moor, Denton Moor, Weston Moor, Blubberhouses Moor

Sites 99-111

### Area 6. Nidderdale

Sites 112-115

There are three sources of unpublished information on Feather's lithic collecting sites:

- A series of 6 inch to the mile OS maps annotated by Feather during his time as unpaid Recording Officer for the Ordnance Survey in the late 1950s, now lodged at the Manor House Museum, Ilkley
- His personal diaries: two handwritten hardback notebooks covering 1956-9 and 1959-1964, eventually destined for the Manor House Museum, but currently in the possession of the author pending further analysis
- His lithic collection, originally stored in a miscellany of tobacco tins, matchboxes, etc. with site details either hastily scribbled on the outside of the container or on a piece of scrap paper inside the tin or box, now held at the Manor House Museum.

It might be thought therefore to be a relatively simple matter of transferring information on sites mentioned in all three sources, but it has been made much more difficult to do for several reasons. Firstly, Feather's maps record all lithic sites and finds known to him at the time, whether discovered by him or not. Secondly, while the majority of sites and discoveries mentioned in his diaries encouragingly tally with those inscribed on the maps, there are a good number that do not occur on the maps at all. Conversely, there are sites recorded on the maps that are not described in the diaries. Thirdly, the physical collection itself was stored in a bewildering miscellany of old pipe-tobacco tins, matchboxes, envelopes, etc. and included several sites not recorded on the maps or mentioned in his diaries. To make matters worse, Feather's handwritten notes, often composed on the spot and in haste, are at times almost illegible and all too frequently his location details are devoid of map references, are frustratingly scant and anecdotal, and in several cases, clearly in error. Finally, by no means all of the lithics he collected during his lifetime have been tracked down and seen by the author, let alone subject to analysis: it is quite clear from his diaries, for example, that he made many discoveries of worked pieces, particularly microliths and arrowheads, which have failed to come to light since his death either in local museums or at his home despite diligent inquiries by the author and one can only assume are therefore sadly lost to the archaeological record. Consequently, what follows can only be at best a partial picture of the true and complete distribution of prehistoric lithics in the area under investigation, but then that will always be true of archaeology based heavily if not solely on the personal collecting habits of individuals. Neither can this of course preclude the possibility of there being further undiscovered yet significant sites out there, be they chance losses during a hunt or the more concentrated remains of a so-called workshop. These problems and provisions must be borne in mind in any assessment of the data which follows. However, Feather's collection is sufficiently large, often involving repeated visits to the same sites over several years, for clear patterns of distribution and concentration to emerge and for a number of conclusions to be drawn concerning a human Mesolithic presence on the moorlands surrounding his home town of Keighley.



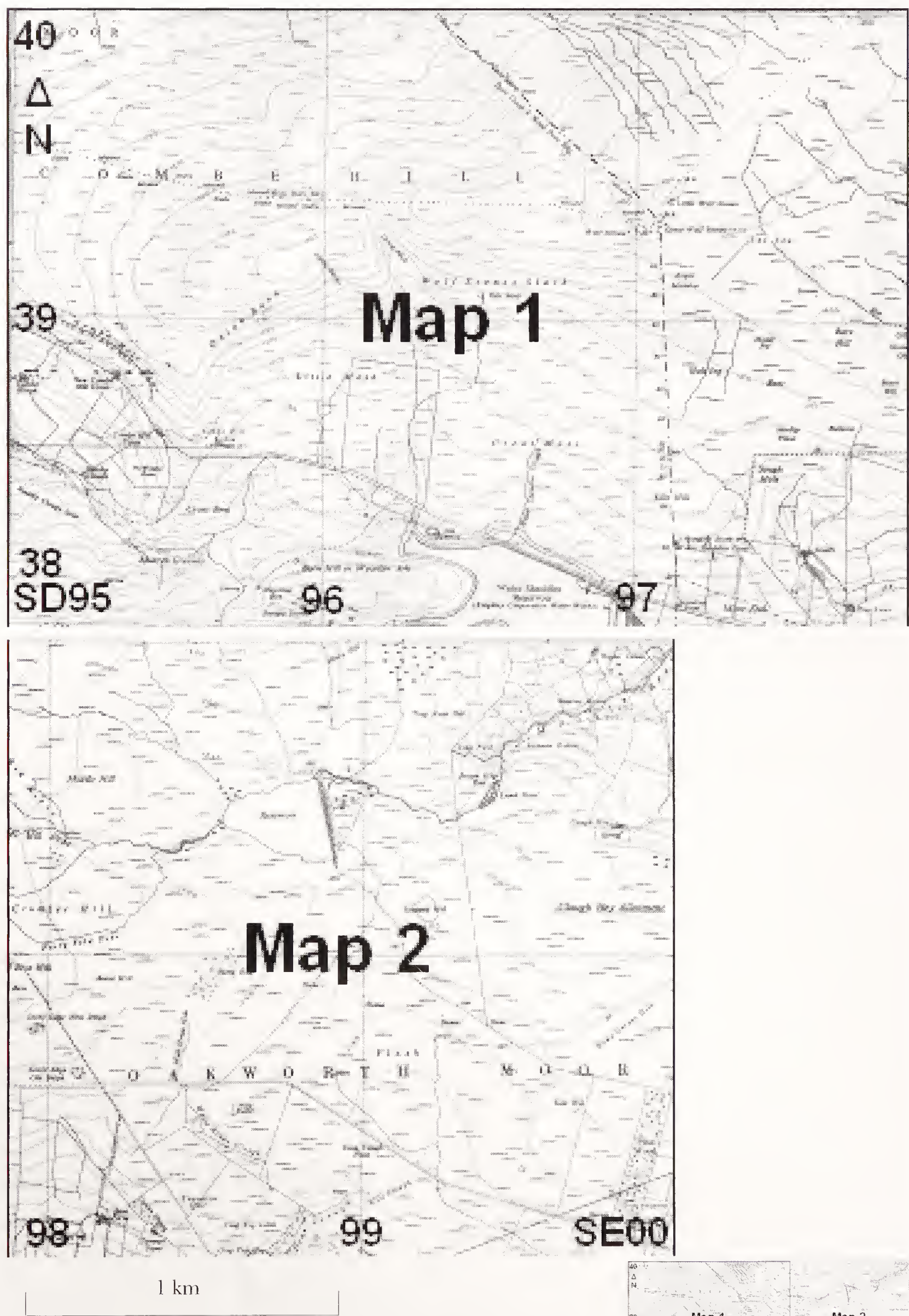


Fig. 5 Overall relationship of Maps 1-2



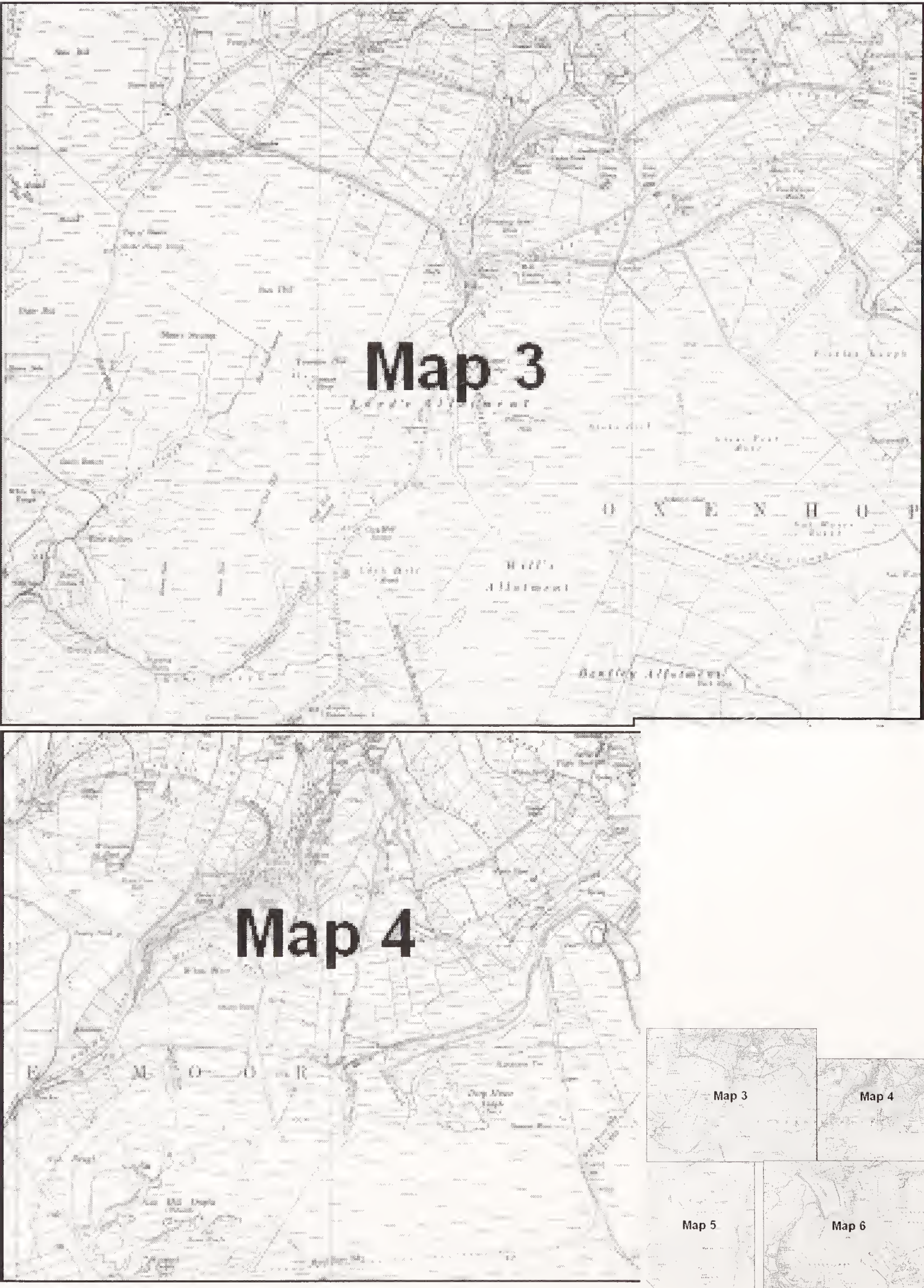


Fig. 6 Overall relationship of Maps 3-6



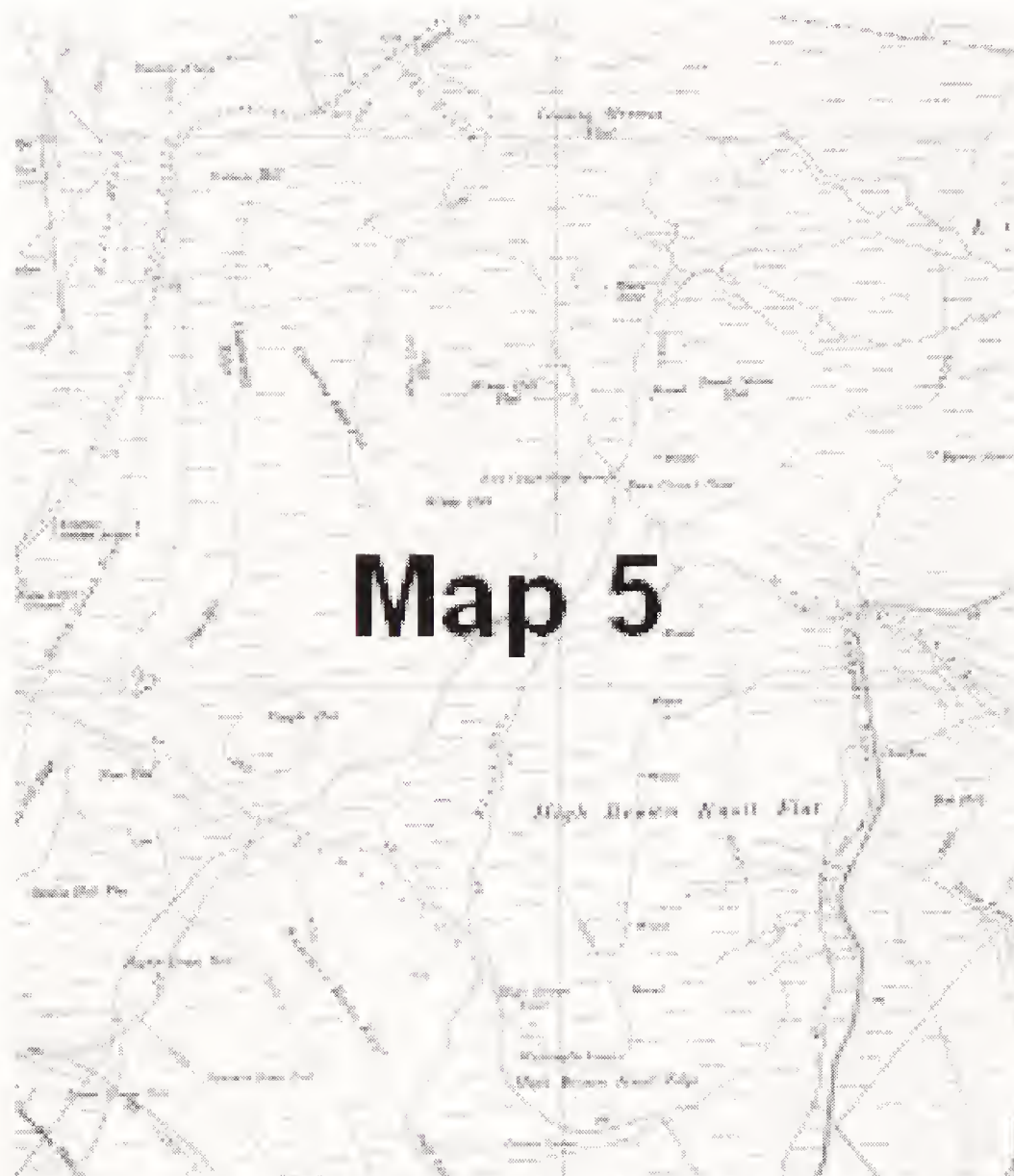


Fig. 6a Overall relationship of Maps 3-6

1 km





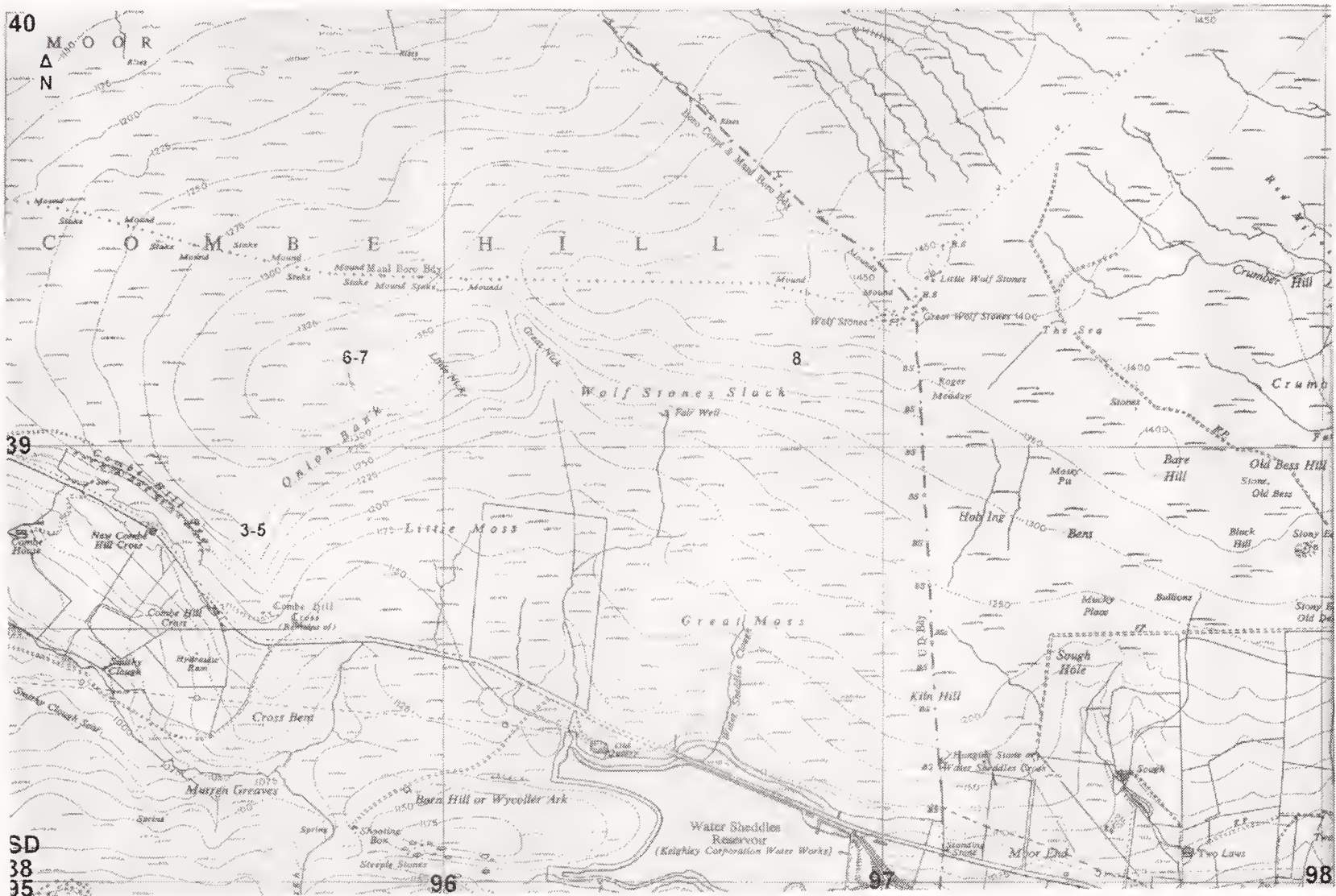


Fig. 7 Map 1: Laneshaw Bridge - Combe Hill (based on OS 6 in:mile series 1956) Sites 3-8



Fig. 8 Map 2: Keighley and Oakworth Moors (based on OS 6 in:mile series 1956) Sites 13, 15, 16, 18 (off-map: Sites 14, 20; insufficiently precise NGR: Site 21; no NGR: Sites 17, 19, 22)









Fig. 10 Map 4: Oxenhope Moor - Cock Hill (based on OS 6in:mile series 1956) Sites 39-41, 47-54 (no NGR: Sites 42-6, 55)



Fig. 11 Map 5: Oxenhope Moor - Nab Water (based on OS 6in:mile series 1956) Sites 50-9, 61-5 (no NGR: Sites 55, 60, 66)





Fig. 12 Map 6: Warley Moor (based on OS 6in:mile series 1956) Sites 68-74 (off map: Site 67; no NGR: Site 75)

Table 1: Gazetteer of lithic sites

Explanation

1. The sites have been numbered according to which map they occur in, working from west to east, and from south to north, for ease of reference. Thus, Sites 3-8 are on Map 1, Sites 13-22 on Map 2, Sites 27-38 on Map 3, Sites 39-54 on Map 4, Sites 50-66 on Map 5, and Sites 67-75 on Map 6. Within each map, sites are arranged according to their NGR, first by easting, then by northing. Where Feather records several sites at the same or much the same NGR, these have been individually numbered to avoid confusion. If in the future, for whatever reason, further sites should come to light with NGRs between those of sites already numbered or a single site on further research resolve itself into two or more close but distinct sites, then the simple suffixes A, B, C etc. will be used following the number of the immediately previous site, to avoid the tedious task of having to otherwise renumber every site. Thus, a 'new' site between, for example, sites 53 and 54 would be numbered 53A.
- a: a small number of sites (14, 20, 33 and 36) are only a small distance off the maps provided: to have included them on their own maps would have increased the number of maps with only one or two sites on each
- b: several sites (17, 19, 22, 42-6, 55, 60 and 66) have no clearly identified NGR other than a generic or local site name given by Feather, e.g. Site 46 Oxenhope Moor, Cock



Hill 'stream? site past radar station', even when the lithics collected are known. For this reason, they are entered on the database below, but not on the accompanying maps

c: site recorded in Feather's diaries but no lithics were available for analysis (41)

d: sites recorded on Feather's maps (34, 52, 63-4): lithics collected by him but not available for analysis

e: sites recorded on Feather's maps (39, 62, 67-74): lithics collected by others (Crowther, Slater, Turner, etc.) but not available for analysis. As these sites occur on the same or immediately adjoining areas, they are included here for the sake of completeness: this applies to all of the sites shown on Map 6.

f: sites identified by Gilks (56); for further details, including an analysis of the lithics, see Gilks 1994.

2. The left-hand number refers to the number of the site on the accompanying maps

3. The name is the name given either by Feather himself to the site or subsequently by the current author to aid clarity

4. The NGR is taken directly off Feather's annotated maps: in cases, where there is a wider than usual scatter of lithics, the NGR represents the appropriate or estimated centre of the scatter

5. Parish is self-explanatory and often information recorded or required by HER records

6. 'SF Map' refers to the series of 6in:mile maps annotated by Feather:

K: SD93NE

N: SE03SW

Z: SE02NW

Thus, N8, N13 means Map N (SE03SW), Sites 8 and 13

7. The final column is the description of the site if one is given by Feather on the annotated map



Table 1: Gazetteer of lithic sites

No.	Name	NGR	Ht. O.D.	Parish	SF Map	Details
Map 1 Laneshaw Bridge: Combe Hill						
3	Onion Bank 1	SD 9557 3881	387m	Laneshaw Bridge CP	K	workshop site
4	Onion Bank 2	SD 9557 3881	387m	Laneshaw Bridge CP	K	workshop site
5	Onion Bank (scattered)	SD 9557 3881	387m	Laneshaw Bridge CP	K	scattered finds
6	Combe Hill 1	SD 958 392	410m	Laneshaw Bridge CP	K	few finds
7	Combe Hill 2	SD 958 392	410m	Laneshaw Bridge CP	K	few finds
8	Wolf Stones	SD 968 392	410m	Laneshaw Bridge CP	K	single waste flake
Map 2 Keighley & Oakworth Moors						
13	Keighley Moor 1 (scattered)	SD 983 395	395m	Haworth, Cross Roads and Stanbury CP	K	
		(N & E of)				
14 <sup>a</sup>	Keighley Moor 2: Hitching Stone	SD 9867 4171	360m	Sutton CP	K	
15	Keighley Moor 3: N of reservoir	SD 9883 3968	384m	Haworth, Cross Roads and Stanbury CP	K43A	
16	Keighley Moor 4: N of reservoir	SD 9883 3968	384m	Haworth, Cross Roads and Stanbury CP	K43B	
17 <sup>b</sup>	Keighley Moor 8: extension site			Haworth, Cross Roads and Stanbury CP	K	
18	Keighley Moor 5: main site	SD 9884 3968	383m	Haworth, Cross Roads and Stanbury CP	K43-50	
	(Big Dam)	(centred on)				
19 <sup>b</sup>	Keighley Moor 9			Haworth, Cross Roads and Stanbury CP	K	



20 <sup>a</sup> Keighley Moor 6: Kid Stone	SD 9962 4175	343m	Sutton CP	K	
21 Keighley Moor 7: Higher Intake (Round Hill)	SD 998 400	305m	Haworth, Cross Roads and Stanbury CP	K	
22 <sup>b</sup> Oakworth Moor			Haworth, Cross Roads and Stanbury CP	K	
Map 3 High Brown Knoll					
27 Flaigh Hill	SE 0049 3085	436m	Wadsworth CP	N27	
28 Bedlam Hill 1	SE 0063 3194 (centred on)	424m	Wadsworth CP	N24A	Mesolithic site
29 Bedlam Hill 2	SE 0063 3194 (centred on)	424m	Wadsworth CP	N24B	Mesolithic site
30 Bedlam Hill 3	SE 0063 3194 (centred on)	424m	Wadsworth CP	N24E	Mesolithic site
31 Bedlam Hill 4	SE 0063 3194 (centred on)	424m	Wadsworth CP	N24F, G, P	Mesolithic site
32 Bedlam Hill 5	SE 0063 3194 (centred on)	424m	Wadsworth CP	N24H	Mesolithic site
33 <sup>a</sup> Low Brown Knoll	SE 0101 2960	401m	Wadsworth CP	Z9	
34 <sup>d</sup> High Brown Knoll Edge	SE 0103 3035	441m	Wadsworth CP	N23	
35 Bare Clough Head	SE 0108 3135	437m	Wadsworth CP	N22	waste flakes



36 <sup>a</sup> Low Brown Knoll Flat	SE 0118 2996	415m	Wadsworth CP	Z10	
37 Burnt Stones Hill	SE 013 315	435m	Wadsworth CP	N	
38 <sup>b</sup> NW of High Brown Knoll			Wadsworth CP	N	
Map 4 Oxenhope Moor: Cock Hill					
39 <sup>c</sup> Stair Hill	SE 0020 3429	426m	Oxenhope CP	N2	Crowther & Turner collections
40 Cock Hill 1: main site	SE 0125 3291 (centred on)	435m	Oxenhope CP	N	workshop site
41 Cock Hill 2 (E)	SE 0142 3288	435m	Oxenhope CP	N15	workshop site
42 <sup>b, c</sup> Cock Hill 3 ‘flint site’	-	435m	Oxenhope CP	N	
43 <sup>b</sup> Cock Hill 4	-	435m	Oxenhope CP	N	
44 <sup>b</sup> Cock Hill 5 ‘new site’	-	435m	Oxenhope CP	N	
45 <sup>b</sup> Cock Hill 6 ‘cortex site’	-	435m	Oxenhope CP	N	
46 <sup>b</sup> Cock Hill 7 ‘stream?’ site	past radar station	435m	Oxenhope CP	N	
47 Little Cock Hill 1	SE 0160 3317	425m	Oxenhope CP	N16	workshop site
48 Little Cock Hill 2	SE 017 332	425m	Oxenhope CP	N	
49 Stake Hill 1	SE 0196 3307	430m	Oxenhope CP	N20	scattered Mesolithic finds



50 Stake Hill 2	SE 0206 3319	430m	Oxenhope CP	N19	scattered Mesolithic finds
51 Bentley Cellar	SE 0208 3294	428m	Oxenhope CP	N	
52 <sup>d</sup> Great Peat Moss 1	SE 0238 3319	420m	Oxenhope CP	N21	scattered Mesolithic finds
53 Great Peat Moss 2	SE 0261 3304	416m	Oxenhope CP	N17	workshop site
54 Nab Water 1	SE 028 327 (centred on)	392m	Oxenhope CP	N	workshop site
55 <sup>b</sup> Nab Water 2			Oxenhope CP	N	
Map 5 Oxenhope Moor: Nab Water					
50-55	as above, Map 4				
56 <sup>f</sup> Nab Water (3 sites)	SE 0285 3240 (centred on)	392m	Oxenhope CP	N	Gilks 1994
57 Nab Hill	SE 0343 3261	445m	Oxenhope CP	N12	Mesolithic flint & chert implements
58 Nab Hill (scattered)	SE 0343 3261	445m	Oxenhope CP	N12	Mesolithic flint & chert implements



59 Great Clough W	SE 0396 3287	404m	Oxenhope CP	N4	partially excavated workshop site
60 <sup>b</sup> Hambleton Hill			Oxenhope CP	N	
61 Hambleton Top 1: main site	SE 0460 3290	423m	Oxenhope CP	N10	many chips
62 <sup>c</sup> Hambleton Top 2	SE 0462 3297	415m	Oxenhope CP	N3	Slater: flint finds
63 <sup>d</sup> Hambleton Top 3	SE 0468 3292	420m	Oxenhope CP	N1	excavated site
64 <sup>d</sup> Hambleton Top 4	SE 0473 3304	405m	Oxenhope CP	N9	core & chips 1956
65 Hambleton Top 5: road site	SE 0474 3289	420m	Oxenhope CP	N18	microlith & chips
66 <sup>b</sup> Hambleton Top – Nab Hill (scattered)			Oxenhope CP	N	
Map 6 Warley Moor					
67 <sup>c</sup> Fulshaw Clough	SE 0293 3003	375m		N5, N14	flints/arrowheads workshop site: 1874-6, 1881 & Turner collection
68 <sup>c</sup> Warley Moor	SE 0325 3049	406m		N5, N14	flints/arrowheads workshop site: 1874-6, 1881 & Turner collection



69° Fly Flats 1	SE 0351 3213	441m	N5, N7	flints/arrowheads workshop site: 1874-6, 1881 & Crowther collection
70° Fly Flats 2	SE 0362 3164	432m	N5, N7	flints/arrowheads workshop site: 1874-6, 1881 & Crowther collection
71° Cold Edge	SE 0393 3106	430m	N5, N7	flints/arrowheads workshop site: 1874-6, 1881 & Crowther collection
72° Ovenden Moor 1	SE 0464 3130	422m	N8, N13	Crowther & Turner collections
73° Ovenden Moor 2	SE 0464 3165	430m	N8, N13	Crowther & Turner collections
74° Ovenden Moor 3	SE 0465 3197	419m	N8, N13	Crowther & Turner collections
75 <sup>b</sup> Wainstalls Moor	Halifax BC		N	

## Details

The lithics were examined in 2007 and 2008 by John and Bob Richardson, who have a proven track record in the identification and classification of lithics from the Yorkshire Pennines and Dales (see Williams, Richardson & Richardson 1987; Richardson, Richardson & Thorpe 2002), having researched lithic sites in the region for more than thirty years. Their system of identification is arranged alphabetically by tool type and based on Green for arrowheads (Green 1980, 1984). It covers sixty-five different categories, of which the twenty-four present in the Feather collection are given in Table 2 below, followed by their full analysis in Tables 3-6 and a summary in Table 7.

Table 2: Classification of lithic types

Number	Description
1	leaf-shaped arrowhead Type 4B (Green's classification)
2	awl/borer
3	blade or bladelet with a length to width ratio of 2:1 or more
4	blade or bladelet with a length to width ratio of 2:1 or more - retouched
5	blade or bladelet with a length to width ratio of 2:1 or more - retouched and notched
6	blade segment
7	blade segment - retouched
8	burin (no attempt has been made to identify the various types)
9	core
10	flake - notched
11	flake - retouched
12	flake - retouched (knife)
13	flake - retouched and notched
14	microburin
15	microlith - obliquely LHS blunted point
16	microlith - obliquely RHS blunted point
17	microlith - straight-backed bladelet 'Narrow Blade' type
18	microlith - scalene triangle, retouched on part or whole length of two sides
19	microlith - scalene triangle, retouched on part or whole length of three sides
20	microlith - fragments of and unidentified microliths 'Broad Blade' type
21	microlith - fragments of and unidentified microliths 'Narrow Blade' type
22	scraper (no attempt has been made to identify the various types)
23	waste (no attempt has been made to identify utilised pieces)
24	miscellaneous - jet, glass beads, etc.



Table 3: Classification of lithics by tool type (see Table 2 above) Sites 1-54 Types 1-10

[illegible]

Table 4: Classification of lithics by tool type (see Table 2 above) Sites 1-54 Types 11-24

Site	11		12		13	14	15	16	17	18		19		20	21		22		23		24
	C	F								C	F	C	F		C	F	C	F	C	F	
3		3											2								43
4		3							1							1			34	17	
5		3														3			12	43	
6																			5	3	
7		1																		5	
8																				1	
13		1														1			2	38	
14																				1	
15													1			2					
16		2													1	2			1	12	
17		2							1				1		1	2			51	192	
18		3							1				2		5	3			32	319	
19																					
20																		1			
21																				1	
22																1				1	
27																1					
28		3											2	1						58	
29	1	2										1	1						19	16	
30													1							4	
31	1	1																	4	4	
32										1									48	2	
33																			1	1	
34																					
35		2														1				19	
36																			15		
37	1																		10		
38											1										
39																					
40	2	18			2	1	1	1					2			4			42	231	
41		4									1								3	17	
42																					
43		1																			1
44																			7	13	
45													1			1				3	
46																			13	3	
47		41			1	7	2	2	2		1		3	3		10	6		31	861	
48		1														1				4	
49																			6	7	
50		1														1			3	1	
51																					
52																					
53	7	6								1	1	6	3		1	5	1		276	89	1
54	1	1										1				1			50	14	



Table 5: Classification of lithics by tool type (see Table 2 above) Sites 55-66 and totals  
Types 1-10

Site	Total	Wkd.	Unwkd.	1	2	3	4	5	6	7	8	9	10				
						C	F		C	F	C	F					
55	12	3	9			1			1								
56																	
57	6	2	4														
58	91	26	65		1		1	2		3							
59	2	0	2														
60	8	5	3				1						1				
61	27	7	20				2			1		1					
62																	
63																	
64																	
65	43	5	38										1				
66	12	9	3				1										
Total	3235	400	2832	1	4	4	36	5	3	15	26	6	1	3	13	8	8

Table 6: Classification of lithics by tool type (see Table 2 above) Sites 55-66 and totals  
Types 11-24

Site	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
	C	F						C	F	C	F	C	F	C	F					
55		1												7	2					
56																				
57		1						1						2	2					
58		13					3			1	2			8	57					
59															2					
60		1	1										1		3					
61		2								1					20					
62																				
63																				
64																				
65		2									1	1		7	31					
66		3					2					3		1	2					
Total	13	122	1		1	9	3	3	11	2	5	8	19	6	11	44	1	8	690	2142

Key to Tables 3-6

Wkd.:	worked	§:	Site 43: clinker?
Unwkd.:	unworked	*:	Site 51: yet to be analysed
C:	chert	#:	Site 53: piece of red ochre?
F:	flint		

Table 7: summary

	total	waste	worked
chert	758	690	68
flint	2473	2142	331
all	3231	2832	399
[56 (Gilks 1994)	14	-	-]

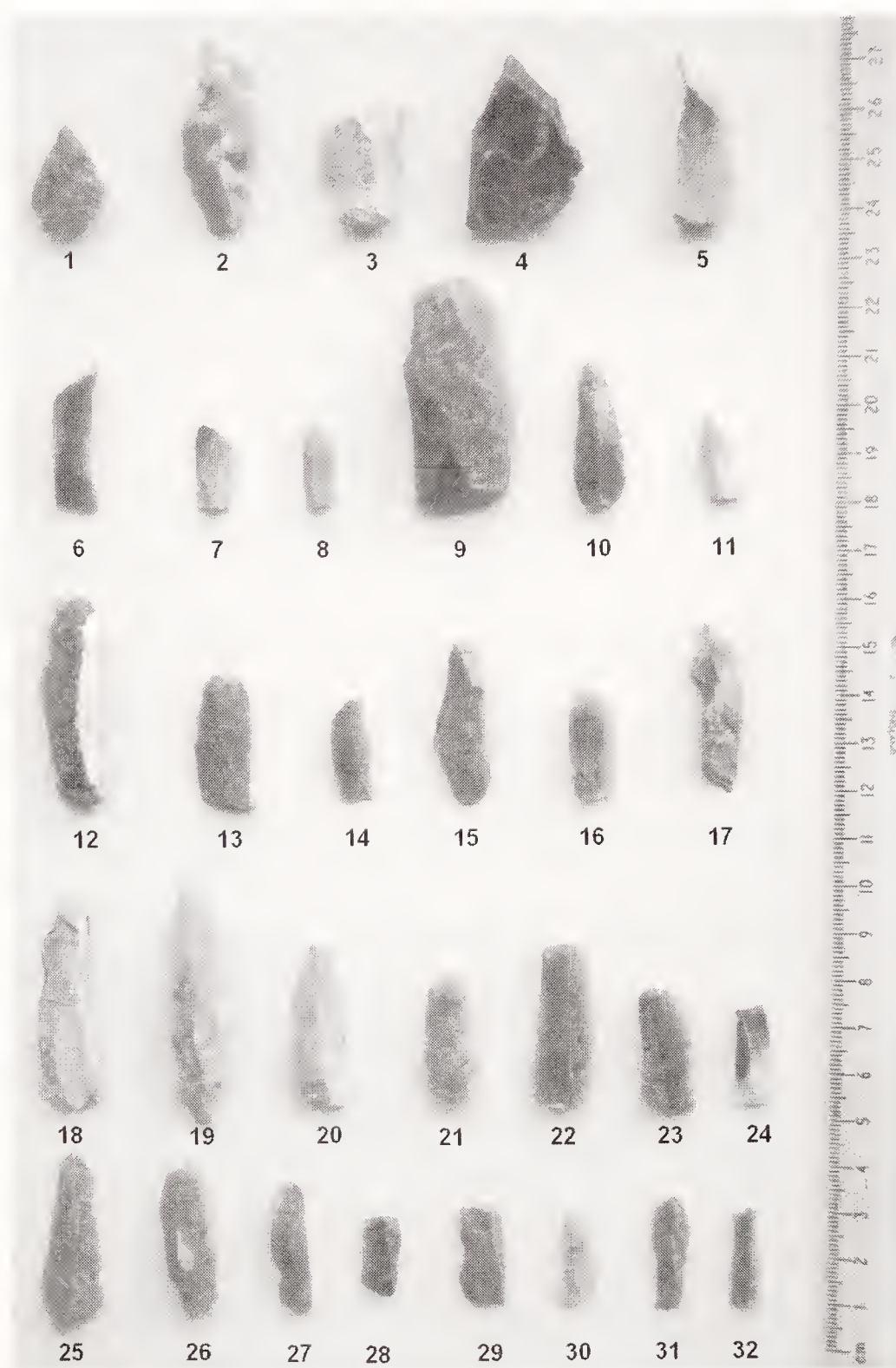


Fig. 13

1 arrowhead (Type 4B leaf-shaped) Oxenhope Moor, Bedlam Hill 1

2-5 awls/borers

2 Keighley Moor 7: Higher Intake (Round Hill)

3-4 Oxenhope Moor: Great Peat Moss 2

5 Oxenhope Moor: Nab Hill Side

6-32 blades

6 Combe Hill 2

7 Keighley Moor 9

8 Oxenhope Moor: Bedlam Hill 1

9 Oxenhope Moor: Bedlam Hill 2

10-11 Oxenhope Moor: Bedlam Hill 4

12-16 Oxenhope Moor: Cock Hill 1 (main site)

17 Oxenhope Moor: Cock Hill 2 (E)

18-32 Oxenhope Moor: Little Cock Hill 1



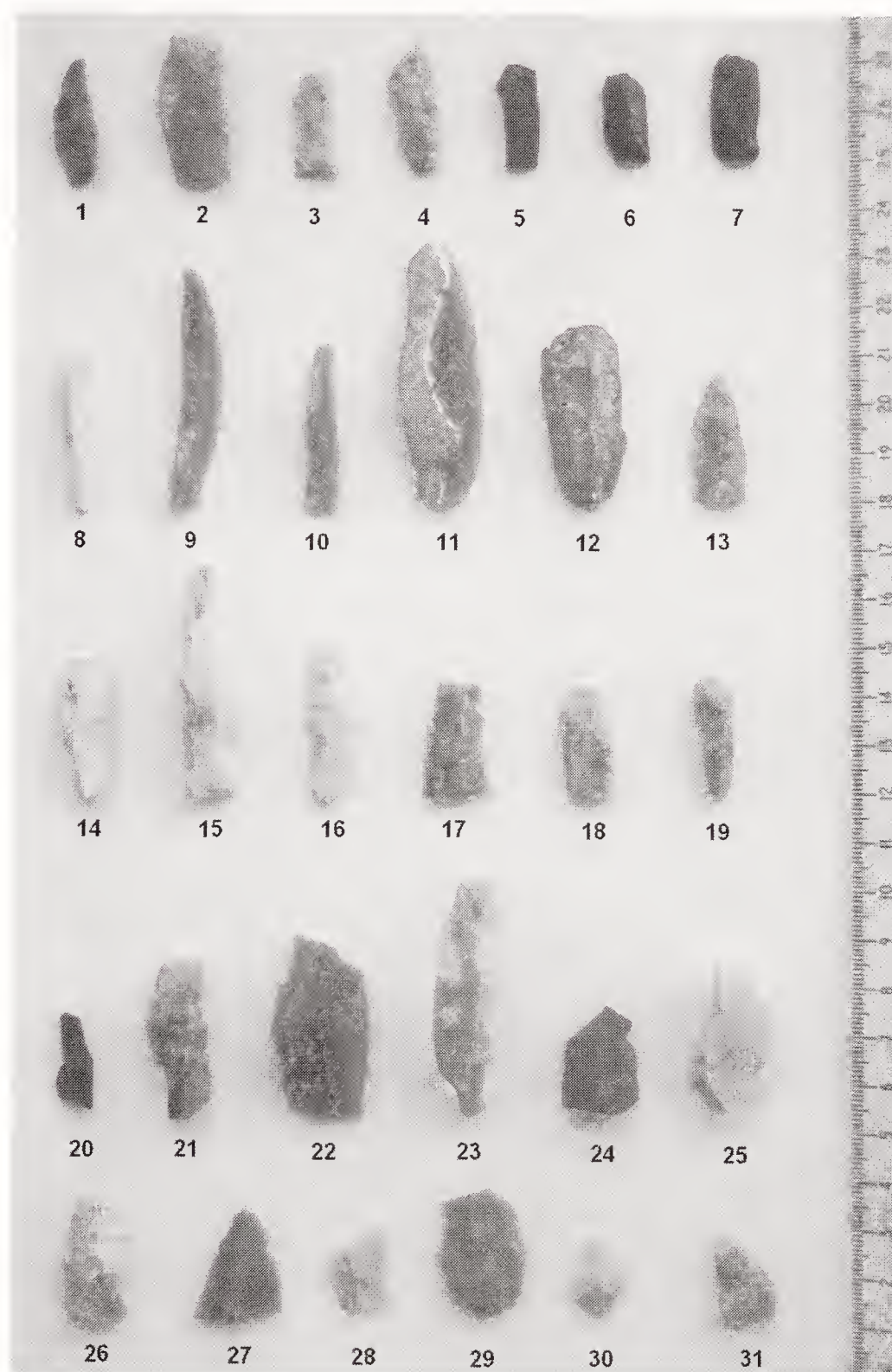


Fig. 14

1-11 blades

1  
2-7 (5-7 chert)

8

9-10

11

12-16 retouched blades

12

13

14

15-16

17-19 retouched and notched blades

17

18-19

20-23 burins

20 (chert)

21

22

23

24-31 notched flakes

24

25-30

31

Oxenhope Moor: Stake Hill 1

Oxenhope Moor: Great Peat Moss 2

Oxenhope Moor: Nab Hill Side (scattered)

Hambleton Top 1: main site

Oxenhope Moor: Hambleton Top - Nab Hill

Keighley Moor 5: main site (Big Dam)

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Cock Hill 7 (stream site)

Oxenhope Moor: Nab Hill Side (scattered)

Oxenhope Moor: Cock Hill 7 (stream site)

Oxenhope Moor: Little Cock Hill 1

Onion Bank 2

Keighley Moor 5: Main Site (Big Dam)

Oxenhope Moor: Cock Hill 2 (E)

Hambleton Top 1: main site

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Hambleton Top 5 (road site)





Fig. 15  
all retouched flakes

1-3

4-6

7-9

10

11

12-13

14-15

16-18

19-21

22-24

25-26

27-28

Onion Bank 1

Onion Bank 2

Onion Bank (scattered)

Combe Hill 2

Keighley Moor 1 (scattered)

Keighley Moor 4: N of reservoir

Keighley Moor 8: extension site

Keighley Moor 5: main site (Big Dam)

Oxenhope Moor: Bedlam Hill 1

Oxenhope Moor: Bedlam Hill 2 (23-24 chert)

Oxenhope Moor: Bedlam Hill 4

Oxenhope Moor: Cock Hill 1 (main site) (26-28 chert)



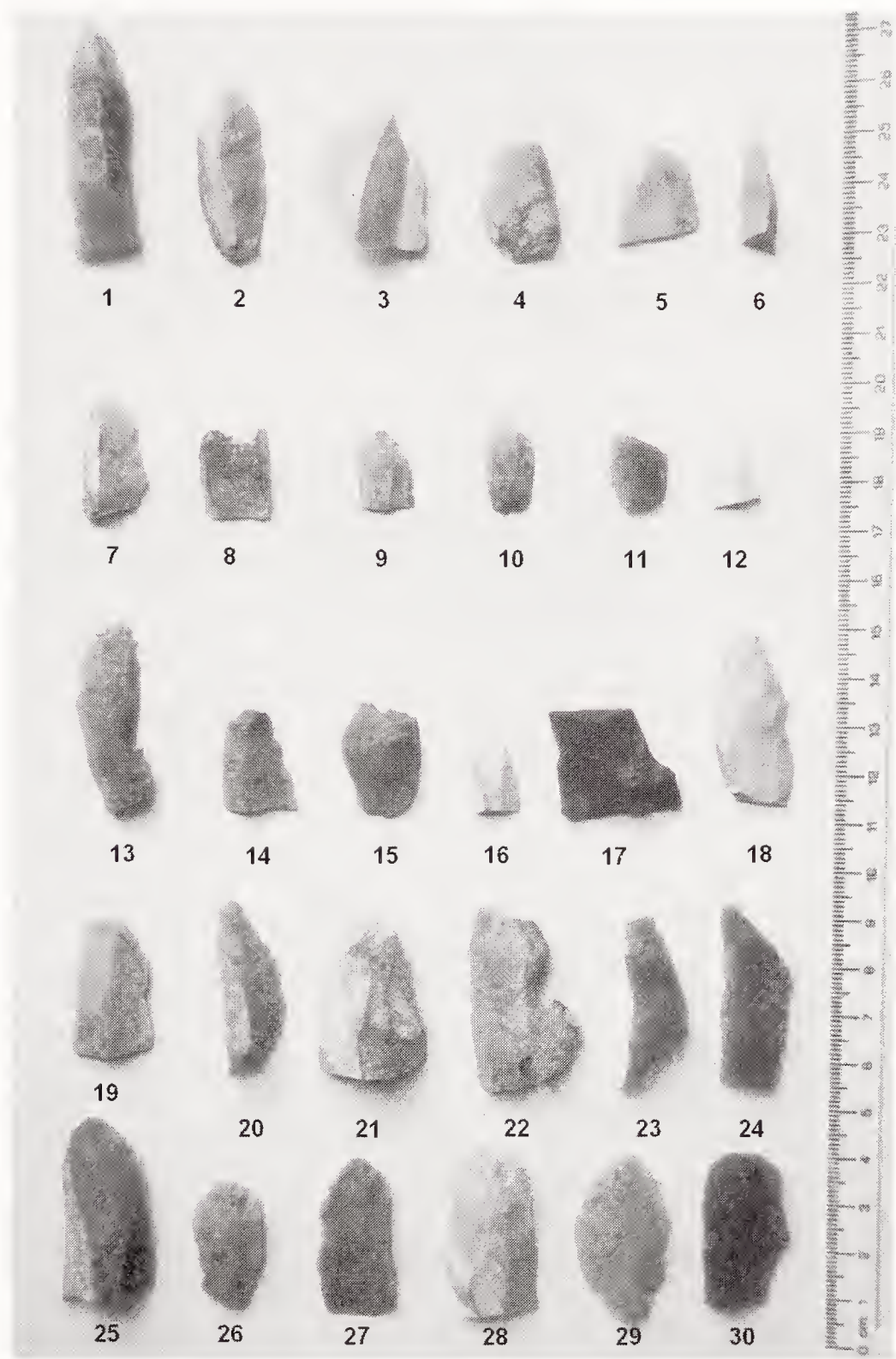


Fig. 16  
all retouched flakes  
1-12  
13-16  
17  
18-30

Oxenhope Moor: Cock Hill 1 (main site)  
Oxenhope Moor: Cock Hill 2 (E)  
Oxenhope Moor: Cock Hill 4  
Oxenhope Moor: Little Cock Hill 1

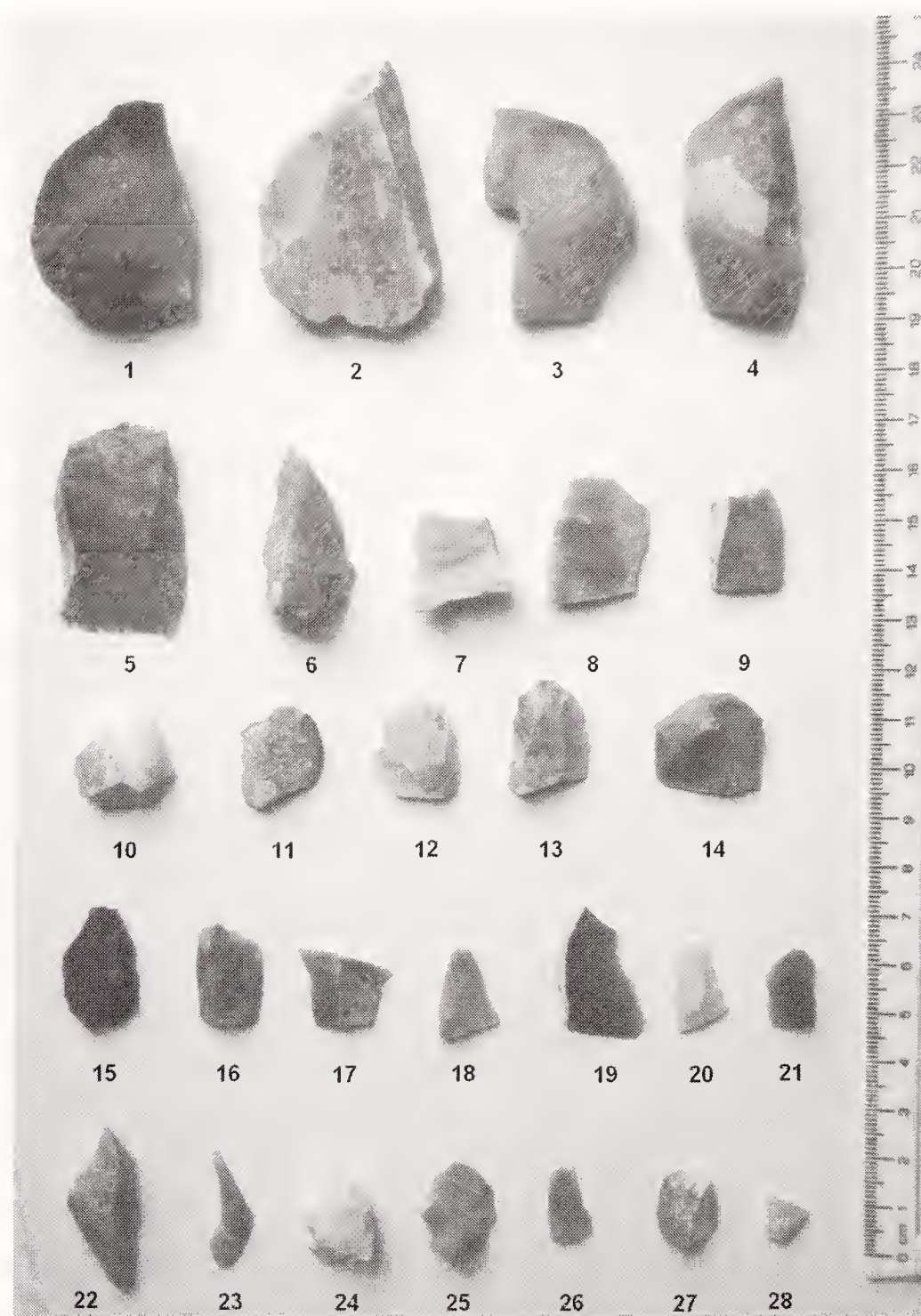


Fig. 17  
all retouched flakes  
1-28

Oxenhope Moor: Little Cock Hill 1



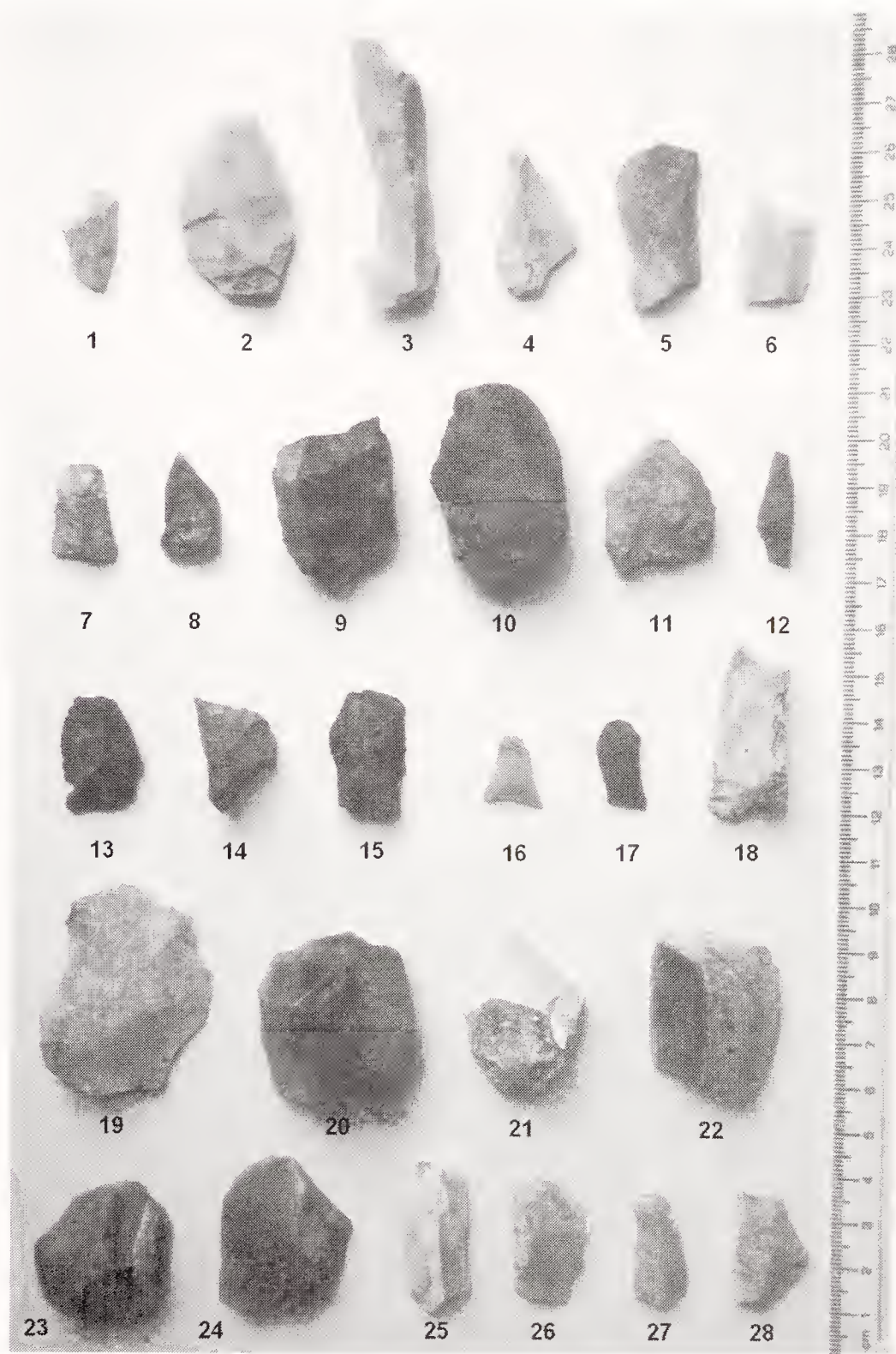


Fig. 18  
all retouched flakes  
1  
2  
3-15 (9-15 chert)  
16-17  
18 (17 chert)  
19-28

Oxenhope Moor: Little Cock Hill 2  
Oxenhope Moor: Stake Hill 2  
Oxenhope Moor: Great Peat Moss 2  
Oxenhope Moor: Nab Water 1  
Oxenhope Moor: Nab Hill side  
Oxenhope Moor: Nab Hill side (scattered)



Fig. 19

1-10 retouched flakes

1-3

4-5

6-7

8-10

11 retouched and notched flake

12-19 microburins

12

13-19

20 LHS obliquely blunted point

21-23 RHS obliquely blunted points

21

22-23

24-33 straight-backed bladelets - 'Narrow Blade' type

24

25

26

27-28

29-31

32-33

Oxenhope Moor: Nab Hill side (scattered)

Oxenhope Moor: Hambleton Top 1 main site

Oxenhope Moor: Hambleton Top 5 road site

Oxenhope Moor: Hambleton Top - Nab Hill (scattered)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Cock Hill 7 stream? site

Onion Bank 2

Keighley Moor 8: extension site

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Nab Hill side (scattered)

Oxenhope Moor: Hambleton Top - Nab Hill (scattered)



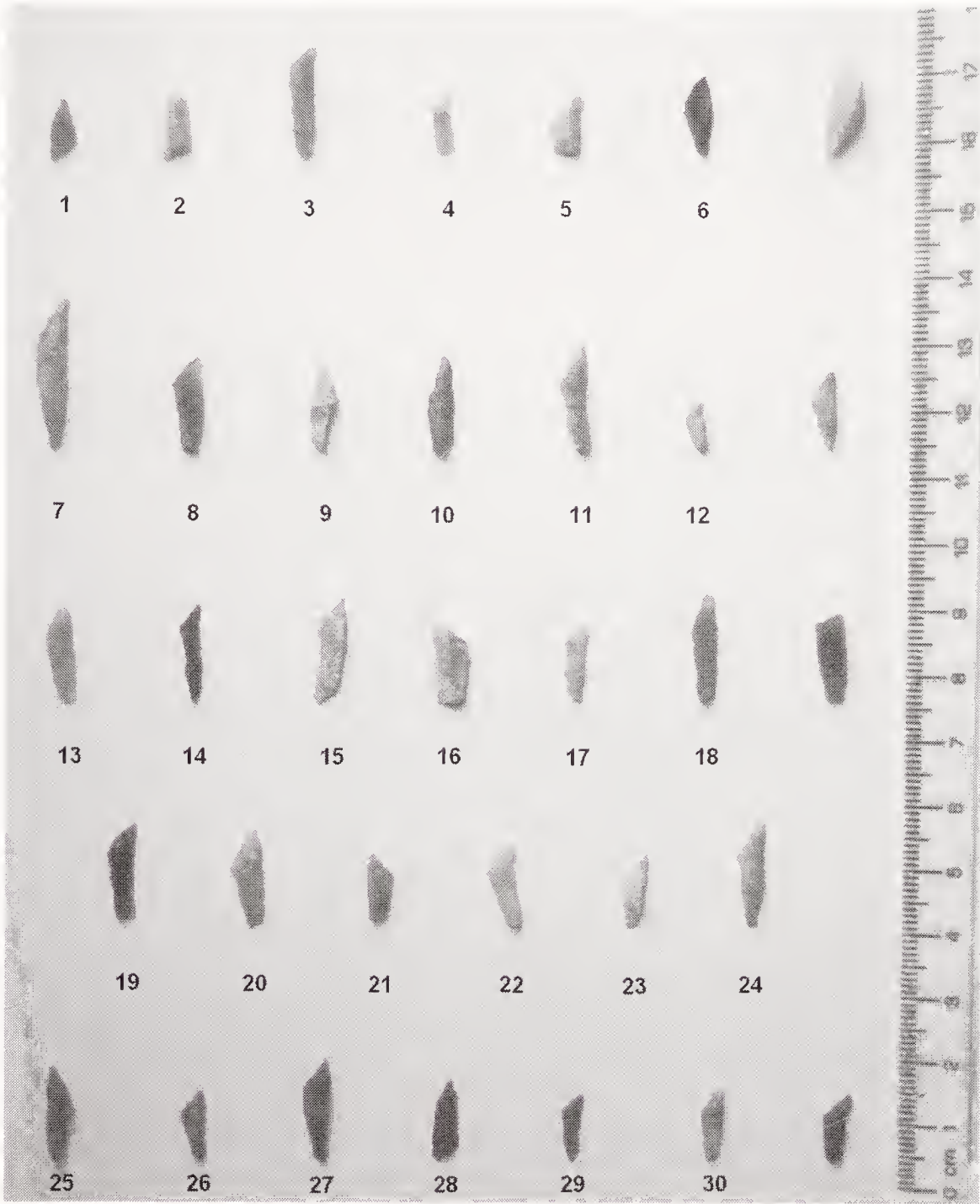


Fig. 20  
1-7 scalene triangles - two sides retouched  
1 Oxenhope Moor: Bedlam Hill 5  
2 NW of High Brown Knoll  
3 Oxenhope Moor: Cock Hill 2 (E)  
4 Oxenhope Moor: Little Cock Hill 1  
5-6 (6 chert) Oxenhope Moor: Great Peat Moss 2  
7 Oxenhope Moor: Nab Hill side  
8-34 scalene triangles - three sides retouched  
8-9 Onion Bank 1  
10 Keighley Moor 3: N of reservoir  
11 Keighley Moor 8: extension site  
12 Keighley Moor 5: main site (Big Dam)  
13-14 Oxenhope Moor: Bedlam Hill 1  
15-16 (16 chert) Oxenhope Moor: Bedlam Hill 2  
17 Oxenhope Moor: Bedlam Hill 3  
18-19 Oxenhope Moor: Cock Hill 1 (main site)  
20 Oxenhope Moor: Cock Hill 6 'cortex site'  
21-24 Oxenhope Moor: Little Cock Hill 1  
25-33 (28-33 chert) Oxenhope Moor: Great Peat Moss 2  
34 (34 chert) Oxenhope Moor: Nab Water

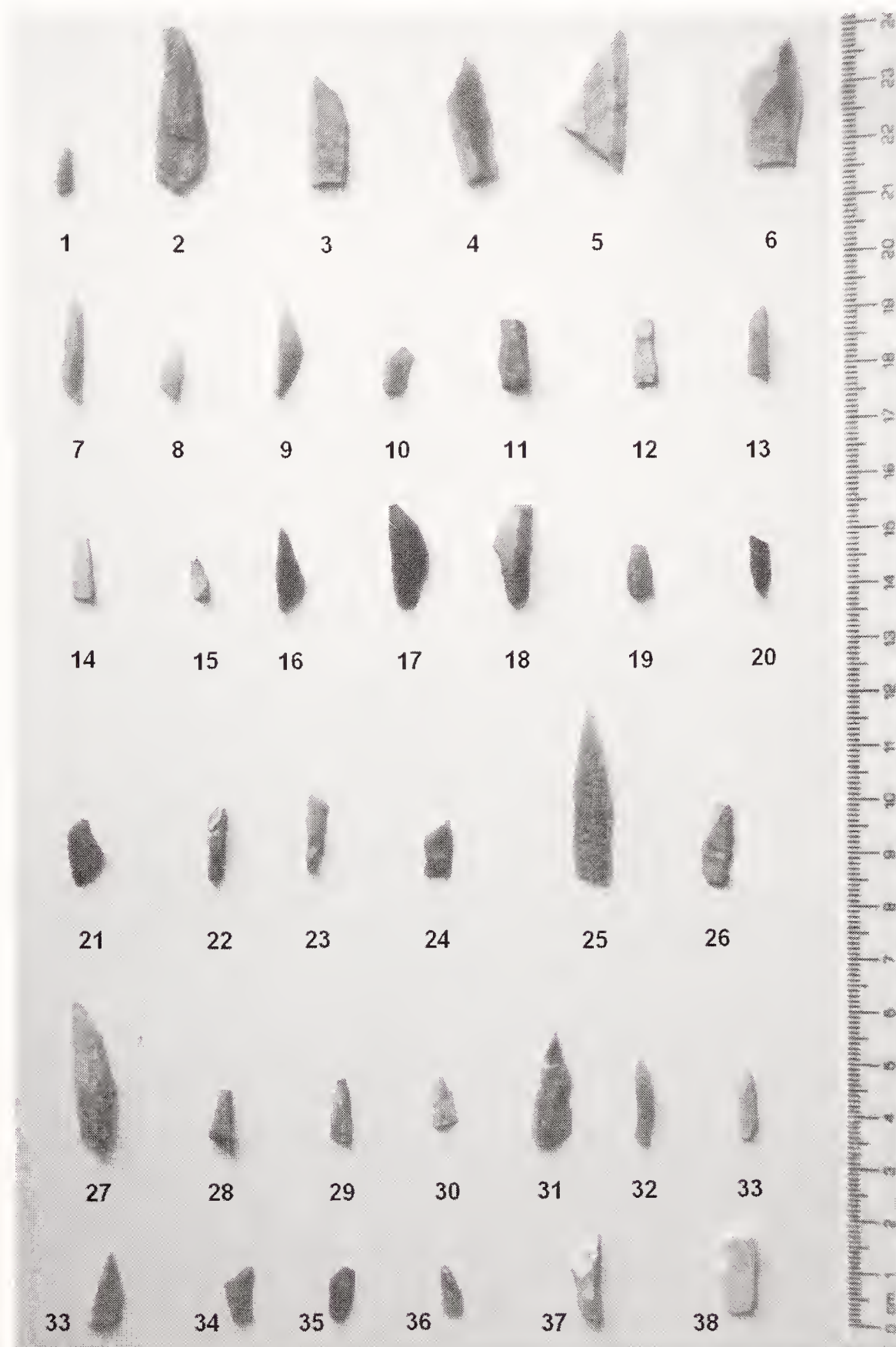


Fig. 21

1-6 'Broad Blade' fragments

1

2-4

5

6

7-40 'Narrow Blade' fragments

7-8

9-11 (11 red ochre?)

12

13-14

15-17 (17 chert)

18-20 (20 chert)

21-24

25

26

27

28-37

38

39

Oxenhope Moor: Bedlam Hill 1

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Nab Hill side (scattered)

Oxenhope Moor: Hambleton Top 1 main site

Onion Bank 2

Onion Bank (scattered)

Keighley Moor 1 (scattered)

Keighley Moor 3: N of reservoir

Keighley Moor 4: N of reservoir

Keighley Moor 8: extension site

Keighley Moor 5: main site (Big Dam)

Oakworth Moor

Oxenhope Moor: Flaight Hill

Oxenhope Moor: Cock Hill 1 (main site)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Little Cock Hill 2

Oxenhope Moor: Stake Hill 2



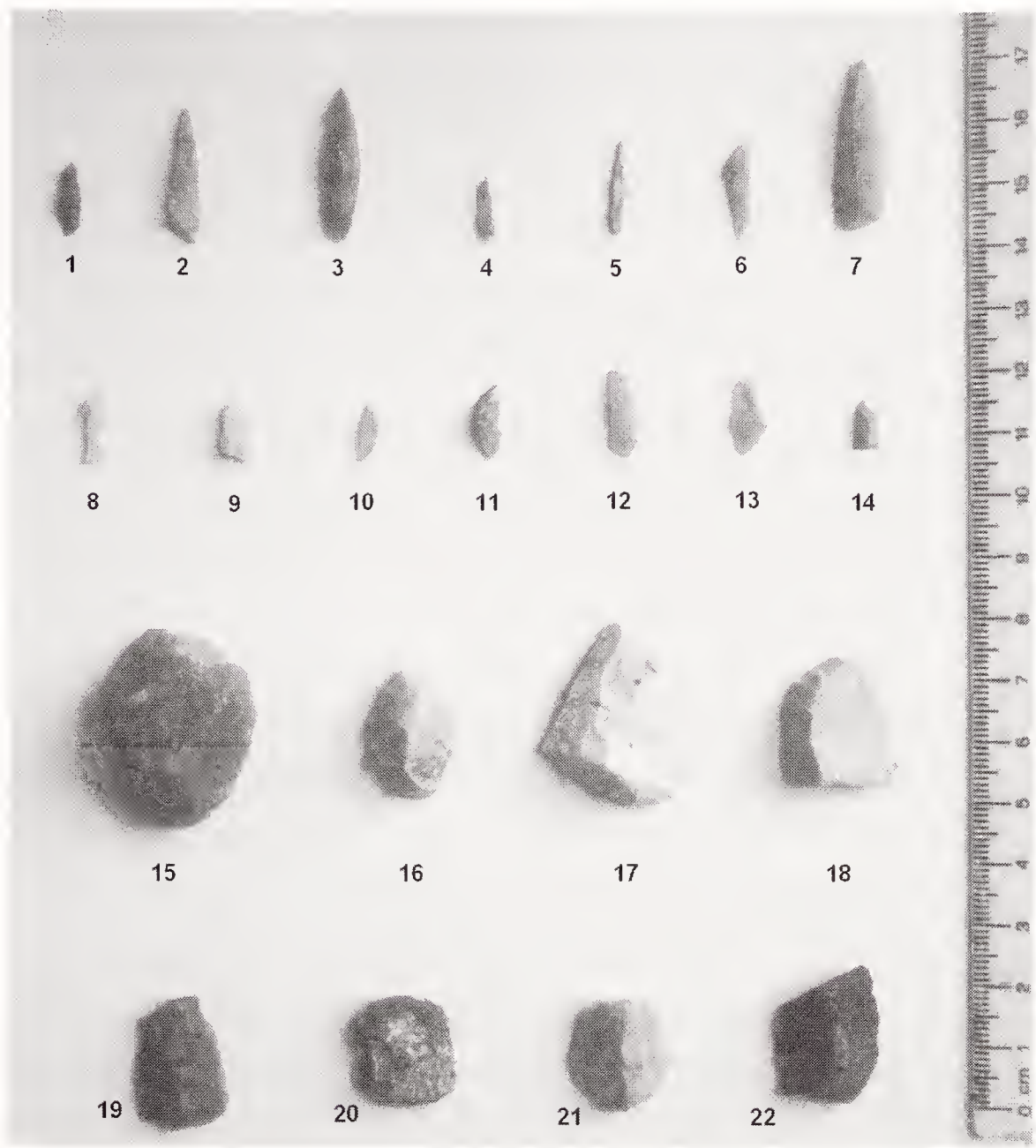


Fig. 22

1-14 'Narrow Blade' fragments

1-6 (1 chert)

7

8-9

10-11

12-14

15-22 scrapers

15-20

21-22 (22 chert)

Oxenhope Moor: Great Peat Moss 2

Oxenhope Moor: Nab Water 1

Oxenhope Moor: Nab Hill side (scattered)

Oxenhope Moor: Hambleton Top 5 road site

Oxenhope Moor: Hambleton Top - Nab Hill (scattered)

Oxenhope Moor: Little Cock Hill 1

Oxenhope Moor: Great Peat Moss 2

## DISCUSSION

Of 3235 pieces, 3232 have been subject to typological analysis: of these, 399 (12.3%) were worked in one way or another. 758 (23.5%) of the analysed pieces were made of Pennine chert, mostly a typical dark grey almost black colour with a small number creamy white: sixty-eight of these (9.0%) were worked. The flint pieces were generally a semi-translucent buff, occasionally highly translucent, or an opaque white. Of the 2473 flint pieces analysed, 331 (13.4%) were worked.

### 1. INDIVIDUAL SITES

Several sites are worth further discussion owing to the relatively large number of finds: these are 17 (252 pieces), 18 (369 pieces), 40 (320 pieces), 47 (1021 pieces), 53 (416 pieces) and 58 (91 pieces). It is worth giving a summary of the worked finds from each of these sites. Supplementary notes are also provided for a number of other sites.

#### *Site 14 Keighley Moor 2: Hitching Stone SD 9867 4171*

The late collector, Joe Davies, also reported finds of Mesolithic lithics from this site (Keighley 1981, 82)

#### *Site 17 Keighley Moor 8: extension site NGR unknown*

252 pieces in total, of which nine (3.6%) are worked: a flint blade segment, a chert core, two retouched flint flakes, a straight-backed 'Narrow Blade' type flint bladelet, a flint scalene triangle, retouched on part or the whole length of three sides and three fragments/unidentified microliths of 'Narrow Blade' type (1 chert and 2 flint). The waste consists of fifty-one pieces of chert and 192 pieces of flint. Fifty-three (21.0%) of the total pieces are chert.

By 'extension site', it is probably safe to assume that Feather meant an extension to the main Keighley Moor site at Big Dam, Site 18 (see below). Again the large amount of waste and the even smaller percentage of worked pieces (3.6%) suggest a workshop site.

#### *Site 18 Keighley Moor 5: main site (Big Dam) centred on SD 9884 3968*

Feather's Keighley Moor sites (Sites 17 and 18) sit on the south-facing slopes of Stone Hill looking down on the upper valley of Morkin Beck, now dammed to form Keighley Moor Reservoir. It is perhaps an intriguing parallel that twentieth century man was attracted to this area for the supply of water just as his Mesolithic ancestors probably were. 369 pieces were collected here in total, of which eighteen (4.9%) are worked. The worked pieces recovered include a retouched flint blade/bladelet with a length to width ratio of 2:1 or more, a chert blade segment, a flint burin, a flint core and three retouched flint flakes. The microliths identified include a straight-backed bladelet of 'Narrow Blade' type, two flint scalene triangles, retouched on part or the whole length of three sides and eight fragments/unidentified microliths of 'Narrow Blade' type, five in chert and three of flint. The waste consists of thirty-two pieces of chert and 319 pieces of flint. Thirty-eight (10.3%) of the total pieces are chert.

According to Feather's map, this 'main site' actually represents a tight cluster of up



to five smaller sites sufficiently distinct to be allocated separate site numbers by him (K43-50) but too close to separate by an eight-figure NGR (i.e. covering an area no wider than 20m across). As the haul from this site is 369 pieces, it is clearly of some significance. The large amount of waste, the relatively small percentage of worked pieces (4.9%) and the close concentration of finds would suggest a typical workshop site.

Davies too collected significant numbers of flint and chert pieces from this area, reporting finds on Trap Nook Hill at SD 988397 and between Brown Edge and Middle Hill, centred on SD 983398 (Keighley 1981, 82).

*Site 20 Keighley Moor 6: Kid Stone SD 9962 4175*

Davies reported finds of Mesolithic lithics from Kid Stone at SD 993418 (Keighley 1981, 82)

*Site 40 Oxenhope Moor: Cock Hill 1 centred on SE 0125 3291*

Cock Hill is a prominent area of higher ground with gently sloping sides on the western flank of Oxenhope Moor: the site commands clear extensive distant views to all points of the compass except where it is obscured by the gradually rising ground of the hill itself to the south. The view to the north down the vale of Bridgehouse Beck past the modern town of Oxenhope to the Worth Valley beyond is especially impressive and it is difficult to ignore the idea that, whatever the vegetation cover may have been locally in Mesolithic times, this particular topography and panorama were important in the choice of site.

320 pieces in total were collected here, of which forty-seven (14.7%) are worked: five flint blades/bladelets with a length to width ratio of 2:1 or more, a retouched flint blade/bladelet with a length to width ratio of 2:1 or more, eight chert blade segments, a retouched flint blade segment, a notched flint flake, twenty retouched flakes (two chert, eighteen flint), two flint microburins, two obliquely LHS blunted flint points (one LHS, one RHS), a straight-backed flint bladelet of 'Narrow Blade' type, two flint scalene triangles, retouched on part or the whole length of three sides and four fragments/unidentified flint microliths of 'Narrow Blade' type. The waste consists of forty-two pieces of chert and 231 pieces of flint. Fifty-two (16.3%) of the total pieces are chert.

The large number of sites located by Feather and others on the slopes of Cock Hill indicate that this part of Oxenhope Moor had a special prominence in the Mesolithic period, not only as an extensive workshop site or set of workshop sites, but the very large number of collected pieces would suggest repeated use as a regular seasonal hunting base or camp on the grounds that such large numbers of tools and waste could not have been lost or deposited all at one time, but over a sustained period.

*Site 46 Oxenhope Moor: Cock Hill 7 stream? site past radar station NGR unknown*

Although only a minor site in terms of finds, it does extend the large Cock Hill distribution southwards. Though Feather fails to give either an NGR or an exact description of the location, there is a stream complex that crosses the A6033 Oxenhope-Hebden Bridge road that runs N-S alongside the western side of Cock Hill at

approximately SE 011 324, 280m S of the S perimeter of the transmitter station. As the name given to it by Feather suggests, this is indeed a streamside site, lying at the S edge of Cock Hill as it dips into the relatively narrow upper course of the stream, but which has scoured out the much broader depression of Roms Clough that opens out to give a panoramic vista of the moors to the W and NW.

*Site 47 Oxenhope Moor: Little Cock Hill 1 SE 0160 3317*

This is the third major site in the Cock Hill area. Little Cock Hill is also a prominent mound up to 200m across, not much lower than Cock Hill itself, with a stream complex skirting its entire W and SW edges. Like Cock Hill, it too commands the same broad views to the N, W and E, and looks directly towards the Cock Hill sites to the south. The hill has a broad flat top covered in erosion banks and patches of exposed gritstone and peat from which the lithics were collected without much, if any, excavation.

1021 pieces in total were collected from here, of which 129 (12.6%) are worked, making it easily the most prolific site in the area: fifteen flint blades/bladelets with a length to width ratio of 2:1 or more, two retouched and notched flint blades/bladelets with a length to width ratio of 2:1 or more, twenty-two blade segments (one chert and twenty one flint), four retouched flint blade segments, two flint cores, six notched flint flakes, forty-one retouched flint flakes, a retouched and notched flint flake, seven flint microburins, two obliquely LHS blunted flint points, two obliquely RHS blunted flint points, two straight-backed flint bladelets of 'Narrow Blade' type, a flint scalene triangle, retouched on part or the whole length of two sides, three flint scalene triangles, retouched on part or the whole length of three sides, three fragments/unidentified flint microliths of 'Broad Blade' type, ten fragments/unidentified flint microliths of 'Narrow Blade' type and six flint scrapers. The waste consists of thirty-one pieces of chert and 861 pieces of flint. Thirty-two of the pieces are chert, which is 3.1% of the total.

What is particularly striking about this site is not only the large number of pieces retrieved but also the range of tools represented, including examples of both so-called Mesolithic 'Narrow' and 'Broad Blade' industries, conferring on this area a special prominence in the Mesolithic period, either in terms of the intensity of activity at any one time or equally in terms of the length of time during which this site was used. Little wonder, then, that Feather himself termed this a 'workshop site'.

Taken together, the Cock Hill sites (40, 46 and 47) would seem to indicate the main topographical factors that must surely have affected the choice of any repeatedly used site: the right aspect, the need for shelter and access to freshwater.

*Site 53 Oxenhope Moor: Great Peat Moss 2 SE 0261 3304*

This site lies on gently sloping ground with a clear view of the entire edge of the Nab Hill massif to the south and of the glaciated valley of Luddenden Brook running away to the SW now dammed immediately below the site to form Warley Reservoir. 416 pieces were collected here in total, of which fifty-one (12.3%) are worked: two flint awls/borers, six blades/bladelets with a length to width ratio of 2:1 or more (three chert, three flint), three chert blade segments, nine chert cores,



thirteen retouched flakes (seven chert, six flint), two scalene triangles, retouched on part or the whole length of two sides (one chert, one flint), nine scalene triangles, retouched on part or whole length of three sides (six chert, three flint), six fragments/unidentified microliths of 'Narrow Blade' type (one chert, five flint) and a chert scraper. The waste consists of 276 pieces of chert and eighty-nine pieces of flint. 307 of the pieces are chert, which is 73.8% of the total.

What is immediately noticeable about the pieces from this site is the unusually high proportion of chert material - almost three-quarters of the total. Discounting waste, the proportion of chert is still high at 60.8% of worked pieces. Interestingly, Wymer and Bonsall record an all-chert site notified by Feather himself on Oxenhope Moor, further south at Luddenden Dean (Wymer and Bonsall 1977, 385).

*Site 56 Nab Water (3 sites) centred on SE 0285 3240*

These sites, excavated in 1972 by Gilks (Gilks 1972), lie alongside Nab Water and occupy similar terrain and views to Site 53 above.

*Site 58 Oxenhope Moor: Nab Hill (scattered), centred on SE 0343 3261*

These sites lie along the heavily quarried flat top of Nab Hill overlooking Nab Water, mostly some 50-100m back from the S scarp edge (for improved shelter?). The hill itself commands superb 180° views down the Worth Valley to the north and looks across to the rising ground of Ovenden Moor (now dominated by a wind-farm) to the south. Significantly, from this vantage point with the modern treeless moorland landscape all the other sites in the area (i.e. 40, 46, 47, 53 and 56) are clearly visible: the mounds of Cock Hill and Little Cock Hill are especially conspicuous. Ninety-one pieces in total were collected here, again mostly from the surface of scattered erosion patches, of which twenty-six (28.6%) are worked: a flint awl/borer, a flint blade/bladelet with a length to width ratio of 2:1 or more, two retouched flint blades/bladelets with a length to width ratio of 2:1 or more, three flint blade segments, thirteen retouched flint flakes, three straight-backed flint bladelets of 'Narrow Blade' type, a fragment/unidentified flint microlith of 'Broad Blade' type and two fragments/unidentified flint microliths of 'Narrow Blade' type. The waste consists of eight pieces of chert and fifty-seven pieces of flint. Eight of the pieces are chert, which is 8.8% of the total.

In complete contrast to Site 53 above, this site is unusual in that all of the worked artefacts are of flint and in the high proportion of worked material to waste.

*Site 59 Great Clough W SE 0396 3287 partially excavated workshop*

Reported by Feather on his map as a 'partially excavated workshop', a site between Great Clough and Wildman Lane at SE 0394 3285 was first mentioned by both Raistrick in his review of Pennine sites (Raistrick 1933, 144, 146) and by Deans in the same year (Deans 1933, 223-5). Sites further E between Great Clough and Hambleton Top, at Deep House Delph (SE 0445 3276) and a scatter of flints along the edge of Little Clough, were also reported.

*Sites 61-64 Oxenhope Moor: Hambleton Top*

These sites occupy a similar terrain and prospect to those on Nab Hill (Site 58) above, as Hambleton Top is essentially its eastern continuation. Sites on Hambleton

Top, centred on SE 0460 3295, were excavated by Deans as far back as 1933, but worked tools were few and the finds were mainly chert waste (Deans 1933).

To complete the record, there are also a handful of finds and sites investigated by Feather in adjoining areas, divided in essence only by archaeologically irrelevant and arbitrary parish or county boundaries. These are:

*Site 1 Boulsworth Hill: Robin Hood's House SD 921 346 Briercliffe CP*

Thirty-three pieces, of which six are worked: three blades/bladelets with a length to width ratio of 2:1 or more (one chert, one flint and one flint retouched), a flint core and a fragment/unidentified microlith of 'Narrow Blade' type.

*Site 2 Bradley Moor Farnhill CP NGR unknown*

A single flint blade.

*Site 9 Ickornshaw Moor: Round Holes SD 9569 4046 Cowling CP Feather Map L Site 31*

Thirty-nine pieces of which five are worked: three chert cores, a retouched flint flake and a chert scraper. The waste was eighteen flint and sixteen chert pieces.

*Site 10 Ickornshaw Moor: Brown Hill SD 9642 4079 Cowling CP Feather Map L Site 31A*

Eight pieces, all waste except for three retouched flint flakes.

*Site 11 Ickornshaw Moor: High End Lowe SD 9683 4100 Cowling CP Feather Map L Site 31B*

Three retouched flint flakes, one of which is also notched.

*Site 12 Stanbury Moor SD 98- 36-*

A single piece of flint waste.

Sadly, Feather's collection also includes a considerable number of unprovenanced pieces including twenty-three Neolithic and Bronze Age arrowheads and twenty-nine assorted other worked tools, though their regrettable total lack of provenance means they may not even have been collected locally, let alone from any of the sites or upland areas so far mentioned in this paper.

## 2. PARTICULAR TYPES OF LITHIC

Turning the lithics database around, instead of a distribution giving the range of lithic types present at each site, we have a distribution giving the sites at which each particular type of lithic is present. Repeating the note of caution given earlier in the paper with regard to any interpretation of lithics based on the whims of individual collectors, a cursory examination of the range of worked pieces represented may still serve to give a tentative or partial characterisation of the Mesolithic industry or industries in question for the region covered, as explained in Table 9 below.

The abundance or frequency of worked pieces or 'tools' in an industry can therefore be defined in one of two ways: by their total number in the entire set, or by the number of individual sites on which they are present. Either way, the most abundant



tools in the Feather collection by a long way, represented by a third (135, 33.8%) of the worked pieces and present in just over half (twenty-eight) of the fifty-four sites analysed, are simple retouched flakes. Just under a quarter (ninety-five, 23.8%) of the worked pieces are blades, found at nineteen sites, while just over a third (145, 36.3%) are flakes present at twenty-eight sites. Microliths of all types (points, scalene triangles, etc,) accounted for over a quarter (112, 28.1%) of the pieces and occurred on over half (twenty-nine, 53.7%) of the sites. The total collection also includes twenty-one cores, nine microburins, thirty-four scalene triangles and nine scrapers. No complete examples of 'Broad Blade' type microliths were recovered and fragments of unidentified microliths of distinctively 'Broad Blade' type were present at only four sites, compared to eleven straight-backed bladelets and fifty-five fragments/unidentified microliths each of distinctively 'Narrow Blade' type which occurred at twenty sites. Fragments/unidentified microliths of distinctively 'Narrow Blade' type occurred at all but one of the sites where straight-backed 'Narrow' bladelets were found.

Another marked characteristic of lithics recovered from Pennine areas is the proportion of flint compared with the poorer but more locally available chert, and this is just as true of Feather's collection. However, chert accounts for only sixty-eight (17%) of the 399 worked pieces. The ratio of worked pieces to waste for flint is 1:6.5 whereas for chert it is 1:10, the different ratios no doubt reflecting the different working characteristics of chert and flint and the greater difficulty of producing a fine cutting or working edge with the coarser chert. Interestingly, the proportion of chert to flint varies considerably from site to site too, to an extent that suggests more than mere chance. For example, taking the four 'largest' sites (i.e. those where the largest number of pieces were collected) all on Oxenhope Moor, we have the figures illustrated in Table 8 below.

Table 8: Chert to flint ratios for the four most prolific sites

	Worked		Ratio	Total		Ratio
	chert	flint		chert	flint	
40 Cock Hill 1 Main Site	10	37	1:3.7	43	231	1:5.4
47 Little Cock Hill	1	128	1:128	31	861	1: 27.8
53 Great Peat Moss 2	31	20	1:0.6	276	89	1:0.3
58 Nab Hill Side	2	24	1:12	8	57	1:7

Clearly, Little Cock Hill and Nab Hill Side are predominantly flint sites with only one and two worked chert pieces respectively whereas by contrast Great Peat Moss 2 is predominantly a chert site where the chert pieces unusually well outnumber the flint in both the worked tools and even more so in the waste. Cock Hill 1 is a more typical mixed lithic site.

These differences can be accounted for either by assuming they are of no special significance and merely within the bounds of chance, or that they may well denote particular groups or individuals that were more culturally disposed to make use of locally available supplies of chert or arising from simple economic factors, e.g. that good quality flint happened to be in short supply.

Most surprisingly, only one arrowhead was recovered (leaf-shaped Type 4B), at Bedlam Hill 1, and even that was a fragment. Similarly, tools more diagnostic of the Neolithic/Bronze Age period, scrapers, were only evident at two of the collecting sites: Little Cock Hill 1 and Great Peat Moss 2. This characterises Feather's lithic collection as almost entirely Mesolithic, in common with the majority of other substantial collections from the region (e.g. Crowther, Gilks, Slater, Turner, Waterhouse), and with a considerably higher proportion of later Mesolithic 'Narrow Blade' as opposed to earlier Mesolithic 'Broad Blade' industry pieces, typical of many sites in the Pennines (Mellars 1974, 89-90.) Indeed, a radiocarbon date for this later period of 6150+150 bc (Q-707) (Radley et al. 1974) comes from hazelnuts associated with geometric microliths (rods, obliquely blunted points and scalene triangles) on neighbouring Ickornshaw Moor.

Table 9: Distribution of artefact types

	Type of artefact (refer to Table 2)	Total no. of artefacts	No. of sites
arrowheads	1	1	1
awls/borers	2	4	3
blades	3	40	15
	4	5	4
	5	3	2
	6	41	9
	7	6	3
all blades	3-7	95	19
burins	8	4	4
cores	9	21	11
flakes	10	8	3
	11	135	28
	12	1	1
	13	1	1
all flakes	10-13	145	28
microburins	14	9	2
microliths	15	3	3
	16	3	2
	17	11	7
	18	7	6
	19	27	12
	20	6	4
	21	55	20
all microliths	15-21	112	29
scrapers	22	9	4



### 3. PENNINE SITES IN GENERAL

It is not the author's claim that Feather's sites or find-spots are entirely original, though a good many of them are. Many others have collected flints off the moorland areas under discussion since the early part of the last century. Accordingly, this is not the place to enter into a detailed discussion of the evidence and distribution of Mesolithic hunter-gatherer communities or their related lithic industries in the Pennines, even less to rewrite the story. This has been done more than adequately elsewhere by Keighley (Keighley 1981, especially 82-3) and the late Pat Stonehouse (Stonehouse 1987-8), and the earlier evidence from Oxenhope Moor in particular has already been well documented by Gilks (Gilks 1971, 1972, 1973, 1974, 1975, 1976, 1980, 1981, 1994) as well as set into its overall cultural and dated context (Gilks 1994). The definitive record of Mesolithic sites in the area remains that published in Wymer and Bonsall (Wymer and Bonsall 1977, 385, 393-4 for Oxenhope Moor and 390 for Keighley Moor). A map showing the distribution of Mesolithic sites on Oxenhope Moor was published back in 1952 by Watson (Watson 1952, 29, Map B). What Feather's lithic collecting activities serve to do is not to change but to add to our body of knowledge of early Mesolithic presence in the Pennines, confirming and extending areas of recorded activity and showing that for the eastern flanks west of Keighley, including around the already well-established site of Nab Water on Oxenhope Moor, both sites and occasional finds are much more numerous and widespread than hitherto believed.

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# A LATE IRON AGE AND ROMANO-BRITISH SETTLEMENT AT HIGH WOLD, BEMPTON LANE, BRIDLINGTON, EAST YORKSHIRE

*By* Ian Roberts

with contributions by

Luigi Signorelli, Diane Alldritt, Craig Barclay, Hilary Cool,  
Jane Cowgill, Peter Didsbury, Jason Dodds,  
Geoff Gaunt, Dave Heslop, Malin Holst and Jane Richardson

*A 1.4 ha excavation, carried out in advance of housing development, investigated the site of a multi-phase settlement dating approximately to between the mid-1st and mid-3rd centuries AD. The earliest later Iron Age activity was represented by a diverse range of apparently unenclosed structures and features, which were replaced by a rectilinear enclosure complex focused upon a principal enclosure containing a central roundhouse. The enclosure complex was subsequently reorganised and expanded, a development which might be equated with a trend from pastoralism towards arable farming. Despite an increase in the adoption of Roman material culture (in the form of pottery), the site seems to have remained essentially native. As well as a notable assemblage of pottery the site has produced significant quantities of animal bone, small assemblages of stone artefacts, ironwork and metalworking residues, six infant burials and a single Roman coin. Earlier prehistoric activity is represented by an assemblage of residual worked flint flakes and tools.*

## INTRODUCTION

The archaeological excavation at High Wold, off Bempton Lane, on the northern edge of Bridlington, was carried out for Persimmon Homes East Yorkshire in 2002 in mitigation of their application for a 4.37 hectare residential development. The excavation, centred on NGR TA 1815 6930, was conducted in order to investigate an enclosure complex that was first detected on aerial photographs and subsequently enhanced and confirmed by geophysical survey and trial trenching. The results of this work revealed the site to be a settlement dating to the later Iron Age/Roman period and confirmed the need for a detailed open-area excavation, as determined by the Humberside Archaeological Partnership. The trial excavations were carried out between the 22nd and 31st July 2002 with the open-area excavation subsequently carried out between 11th September and the 21st November 2002.

The 1.4 hectare investigation area at High Wold was bounded to the west by Bempton Lane, to the south by residential housing adjoining Orchard Close, and to the north and east by agricultural land (Fig. 1). Topographically the site lies approximately between 54-45 m OD, the land falling away towards the south-east. The underlying geology consists of Flamborough Chalk overlain by Boulder Clay, whilst the soils

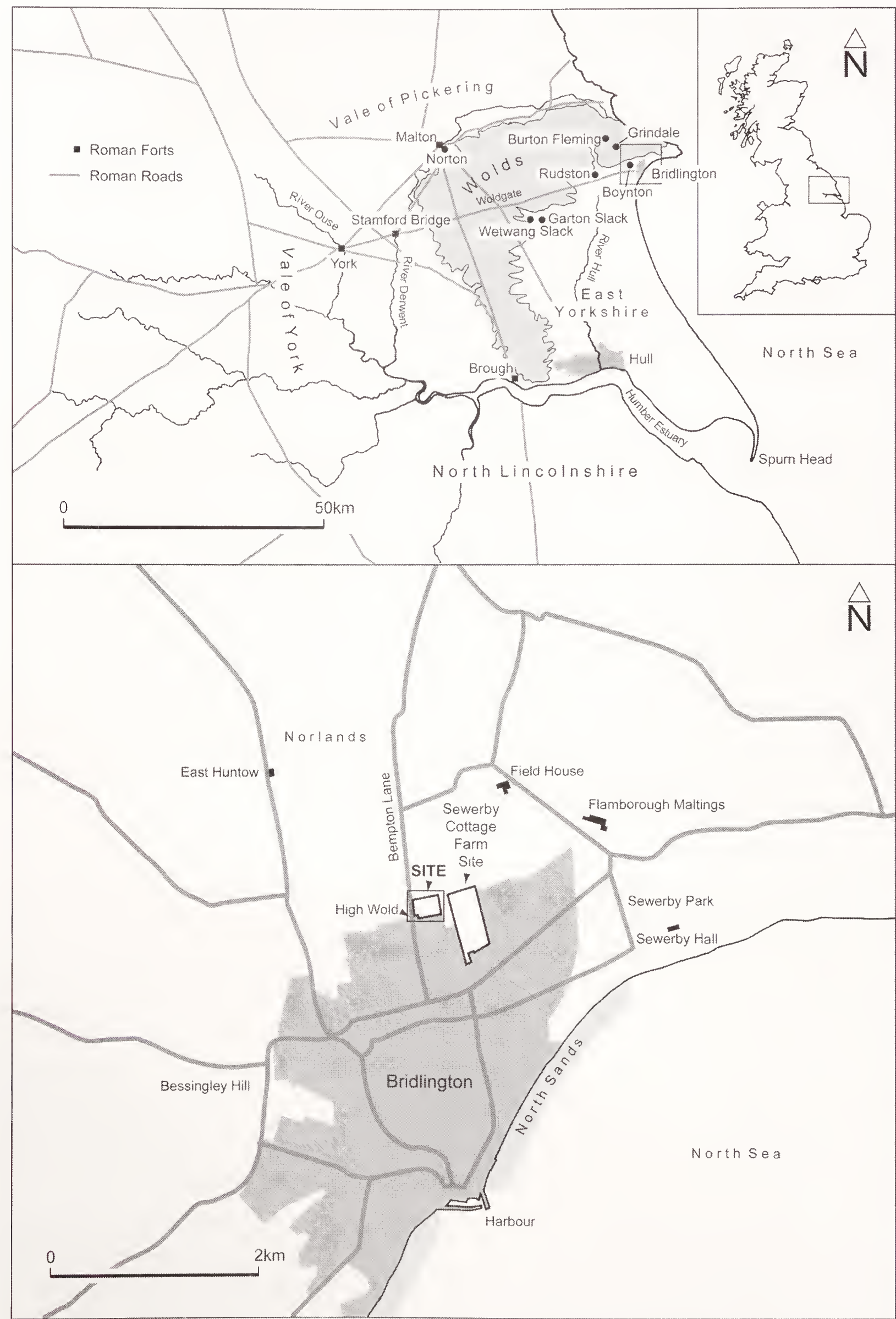


Fig. 1 Site location map showing sites mentioned in the Archaeological Background



belong to the Burlingham 2 Association and are dominated by fine loamy soils with slowly permeable, and seasonally waterlogged, subsoil formed in chalky till (British Geological Survey 2001; Soil Survey of England and Wales 1983). The fills of the archaeological features encountered were invariably of a silty clay composition with occasional sandy clay loams, ranging in colour from a yellow/orange-brown through to brown/grey.

## ARCHAEOLOGICAL BACKGROUND

### Regional Overview

#### *Earlier Iron Age*

Past research into the Iron Age of the Wolds has focused largely upon the distinctive square barrows of the Arras culture, a phenomenon unique to East Yorkshire in Britain. These barrows, which date mainly to between the 5th and 1st centuries BC, are confined largely to the high Wolds, where they occur in cemetery groups, although isolated examples and small groups do occur elsewhere (Dent 1999, 5; Cunliffe 2005, 214; Stoertz 1997, 35, fig. 15). The predominant upland location of Arras cemeteries accords with notions of a high Wold dedicated largely to grazing, a land-use that some have seen to be further implied by the extensive dyke systems which appear at a similar time. The contemporary settlements, however, remain obscure (Fenton-Thomas 2003, 52; Mackey 2003, 117; Millett 1989, 39-40; Stoertz 1997, fig. 20). The failure to detect these settlements has generally been explained by the supposition that they were unenclosed and so difficult to detect as crop marks. Open settlements dating from the 4th century BC are well known and have been seen as contemporaries of the large linear earthworks, possibly as seasonal settlements of different function (Giles 2007a, 108-9). One of the best known open settlements is at Garton Slack and Wetwang Slack where, importantly, the chronological and stratigraphical succession from a square barrow cemetery to open settlement and subsequent enclosure in the later Iron Age and Roman period is best demonstrated (Mackey 2003, 119; Stoertz 1997, 46-7; Bradley 2007, 263-67).

#### *Later Iron Age and Roman Period*

The later Iron Age saw the Wolds forming the principal geographical unit of the tribal territory of the Parisi, whose relative isolation and local identity probably owed much to the natural barriers created by the Humber marshes to the south and the vales of York and Pickering to the east and north respectively (Millett 1989, 38).

From the later Iron Age single enclosures containing one or more roundhouses, nucleated groups or rectilinear sequences of linking enclosures ('ladder' or 'droveway' settlements), all become prevalent and continued to become features in the Romano-British rural landscape of the region (Dent 1999, 6; Fenton-Thomas 2003, Mackey 2003, 119-20; Stoertz 1997; Giles 2007b, 236). These complexes were often associated with a wider field system as the landscape became increasingly more enclosed and spatially organised in what has been seen as the final phase of a process of land division that began with the establishment of the extensive ditches of the Late Bronze Age (Bevan 1999, 129; Fenton-Thomas 2003, 65). The trend towards enclosure was once equated with a perceived intensification of agriculture as a



response to the Roman conquest (Ramm 1978, 10, 77). As the process seems to have started in the late pre-Roman Iron Age it has since been viewed as a product of population increase (Branigan 1984, 27, 30; Dent 1983, 37-40; Hingley 1989).

In reality it has proved very difficult to detect any marked change in the nature of native rural settlement between the later Iron Age and the first two centuries of Roman occupation, although some localised settlement patterns were clearly affected by the advance of the Roman frontier after AD 71 (Creighton 1990; Dent 1988, 98; Millet 1999, 225). The Parisi seem to have been incorporated into the Roman Empire with relative ease, possibly as a result of pre-existing political and trading associations (Cunliffe 2005, 215). As a consequence, the military presence in East Yorkshire is generally seen to have been focused towards the more problematic Brigantian territory, with forts and road networks strategically positioned in the western and north-western parts of the Parisian territory (Fig. 1). This may explain why there was apparently little Romanisation of the vast majority of the native population in East Yorkshire during the 1st and 2nd centuries (Dent 1983, 43; Millett 1990, 61). In the early Roman period the rural landscape generally seems to have been little changed, the impact on it being very localised, invariably in the immediate vicinity of forts, *vici* and Roman roads (Hingley 1989, 145; Taylor 2001, 53).

With a few exceptions the appearance of villa sites, Romanisation in general does not take place until the 3rd and 4th centuries, a period some consider to have seen the greatest subdivision and partitioning of the landscape in this area (Giles 2007a). The success and expansion of certain Romanised estates and villas at this time seems to have been at the expense of the smaller native-type farms that saw a marked decline in the 3rd century throughout East Yorkshire (Spratt 1984, 155; Mackey 1999, 29; Fenton-Thomas 2005, 70). This trend might be related to a change in landscape ownership and management in the later Roman period, a time when wealth could perhaps no longer be generated through an army-driven economy (Jones 1984, 42; Fenton-Thomas 2005, 73).

If a predominantly pastoral exploitation of the Wolds seems likely for the earlier Iron Age, then the querns, crop drier and granaries found in considerable numbers on later Iron Age and Romano-British rural sites suggest a more agrarian economy (Dent 1983, 42). Nevertheless, the relatively low incidence of villas in the region suggests that agriculture remained largely on a domestic scale in the Wolds, even if the economic onus shifted (Powlesland 2003, 288). Arable farming seems to have been just one element of a broader mixed economy, where animal husbandry was still important. The faunal assemblages of the pre-Roman Iron Age are generally found to be dominated by sheep/goats (Haselgrove 1984, 14). Branigan (1984, 30) posed the possibility that certain native farmers may have switched from a mixed subsistence economy to a pastoral one to meet the demands of the Roman army, although Ramm (1978, 107) envisaged a large military demand for wheat. In fact it is likely that most early Romano-British farms also operated on a mixed economy basis, although there is evidence from sites in the Hull valley to suggest that the emphasis switched to cattle rearing (Evans and Steadman 2001, 86). It would seem likely that apparent



differences or changes to the economies of native sites, whether represented in the supply of material culture, or the proportions of crops grown and animals consumed, will have had much to do with their proximity to major Roman urban centres and trade routes (see for example Evans 2000, 197-8).

## The Bridlington Area

### *Early Prehistoric*

Barrows and ring ditches are known on the high Wolds all around Bridlington (Stoertz 1997, figs. 13 and 32), although it is clear from records held by the Humber Archaeological Partnership Sites and Monuments Record (SMR) that at least six barrow sites existed in the present urban area within 2.5 km of the Bempton Lane site (Fig. 1). The closest of these lies within 0.75 km to the south-east in an area also known for evidence of Neolithic occupation. Most notable are the findings from Sewerby Cottage Farm where Neolithic occupation from the 4th millennium BC has been identified in recent excavations (Fenton-Thomas *forthcoming*). A small group of flints has also been recovered from a site immediately to the west of the Bempton Lane site, whilst a Neolithic flint assemblage has also been reported just east of Flamborough Maltings, 2 km to the north-east. Most of the more notable spot finds in the area are Bronze Age metalwork items. These include daggers, halberds, palstaves and a socketed and a flanged axe. Most of these artefacts have either no specific provenance or lie some distance from the Bempton Lane site. The nearest, a palstave, was found 1 km to the south-west of the site. The enigmatic earthwork known as 'Dane's Dyke', 4 km to the east of Bempton Lane, is thought to be of Bronze Age date but would have formed a major landscape feature in subsequent periods.

### *Late Iron Age and Roman Period*

Stoertz (1997, fig. 15) has mapped Iron Age square barrows on the high Wold to the west of Bridlington, as well as an isolated group in the northern part of the town. The SMR records three examples, with a fourth being known from the Sewerby Cottage Farm excavations less than 0.5 km to the east. Both the square barrow and a round barrow found at Sewerby Cottage Farm have been firmly dated to the later Iron Age (Fenton-Thomas 2009).

The high density of rural settlement enclosures mapped as crop marks are mainly concentrated to the west of the Bempton Lane site on the high Wolds, around Boynton and Grindale, and to the east of Burton Fleming, where they are superimposed upon the early prehistoric ritual landscapes between Burton Fleming and Rudston (Stoertz 1997, 52-3; fig. 26). Relatively few crop marks have been mapped in the landscape to the north of Bridlington. Three double-ditch rectilinear enclosures are known in the vicinity of Bempton Lane: at East Huntow, at Field House and to the north of Flamborough Maltings. That to the south-west of Fieldhouse, just 1 km north-east of the Bempton Lane site, lies at the junction of two trackways and comprises an almost square principal enclosure with sub-enclosures appended to the north and south, and elements of a wider rectilinear field system complex (Stoertz 1997, 25, map 2; see Fig. 1).

Excavation at Sewerby Cottage Farm, immediately to the east has revealed part of a settlement enclosure and associated field boundaries dating from about 100 BC and continuing until the mid-3rd century AD (Fenton-Thomas 2005, 67-70; Fenton-Thomas 2009, 198-253). Further afield there are a number of Late Iron Age/Romano-British settlement sites known around the edges of Bridlington, particularly on the western fringe around Bessingley Hill and to the east around Sewerby Hall. Roman finds of pottery, coins and other items indicative of settlement have been recovered from the town (e.g. Mellor 1951) and it is generally accepted that Bridlington was probably a port of some size in the Roman period. This notion is strengthened by the course of the known Roman road (Woldgate), and two other potential Roman roads that project towards the town and, moreover, by the locations of four villas in the immediate hinterland (Ramm 1978, fig.16; Branigan 1980, 19, fig. 3.1; Dent 1983, 40; Stoertz 1997, fig. 35). The continued presence of a settlement in the post-Roman period is attested by the Saxon cemetery at Sewerby (Hirst 1985).

## AIMS, OBJECTIVES AND METHODOLOGY

*By Ian Roberts with Luigi Signorelli*

There are now known to be some 4000 rectangular ditched enclosures on the Wolds and surrounding areas which are largely believed to reflect domestic and stock enclosures associated with later Iron Age and Romano-British settlement. Yet, there is relatively little understanding of the chronology, continuity, function and economy (and Romanisation) of native rural settlement complexes as relatively few have been the subject of large-scale excavation (Stoertz 1997, 86; Dent 1999, 4; Powlesland 2003, 288; Rigby 2004, xiii; Mackey 2003, 120-21; Cunliffe 2005, 275-7). The Bempton Lane excavation provides further data and perspective towards an understanding of the nature of native rural settlement evolution and the chronology of economic transition, with particular reference to the influence of Roman occupation in East Yorkshire.

Although not mapped by Stoertz (1997, map 2) in her study of the Wolds, the Bempton Lane site was first detected as fragmentary crop marks on aerial photographs. Subsequent evaluation by geophysical (magnetometry) survey and trial trenching (see Figs. 2 and 3) revealed a nucleated complex of rectilinear settlement enclosures dating to the later Iron Age and Roman period (GeoQuest Associates 2001a; 2001b; Cudlip 2002). Consequently, the principal enclosures were targeted for open-area excavation. Topsoil stripping was carried out over the whole site except for part of the south-western area which had to be avoided due to asbestos contamination (Fig. 3).

The initial intention for the open-area investigation was that the whole site would be stripped, but the onset of prolonged and severe wet weather required the excavation strategy to be significantly modified. Following consultation with the Humber Archaeological Partnership, it was agreed that the eastern part of the site would be subject to a rapid strip and record exercise to obtain a plan and whatever dating evidence was possible in the allotted time. The severe wet weather also took its toll on the western part of the site where parts of the site became permanently water-logged. As a result, a number of features recorded at the pre-excavation planning stage could not be relocated for excavation.



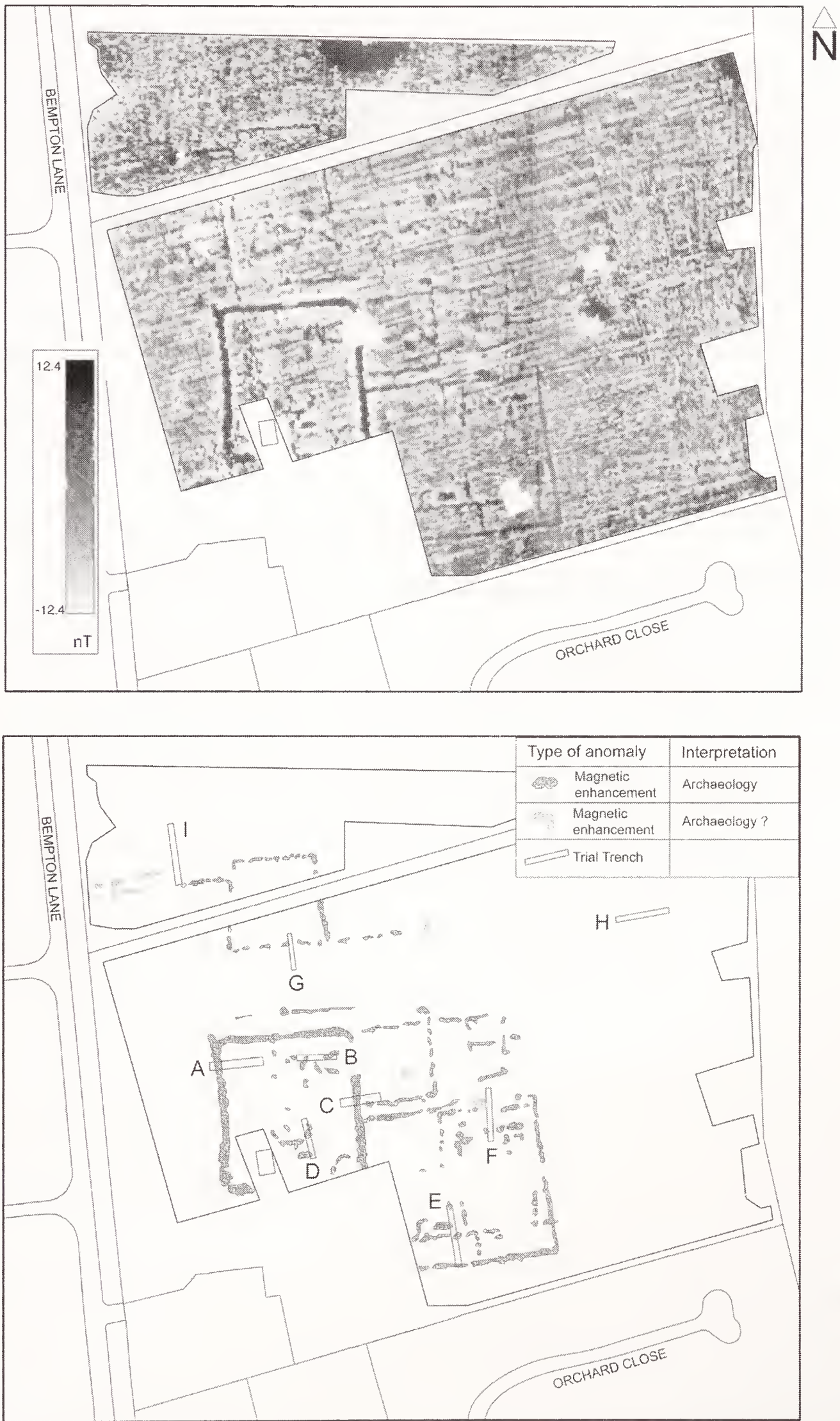


Fig. 2. Pre-excavation evaluation. A grey scale plot of the geophysical survey results (after GeoQuest 1999), with an interpretative drawing and trial trench locations (A-I) below.

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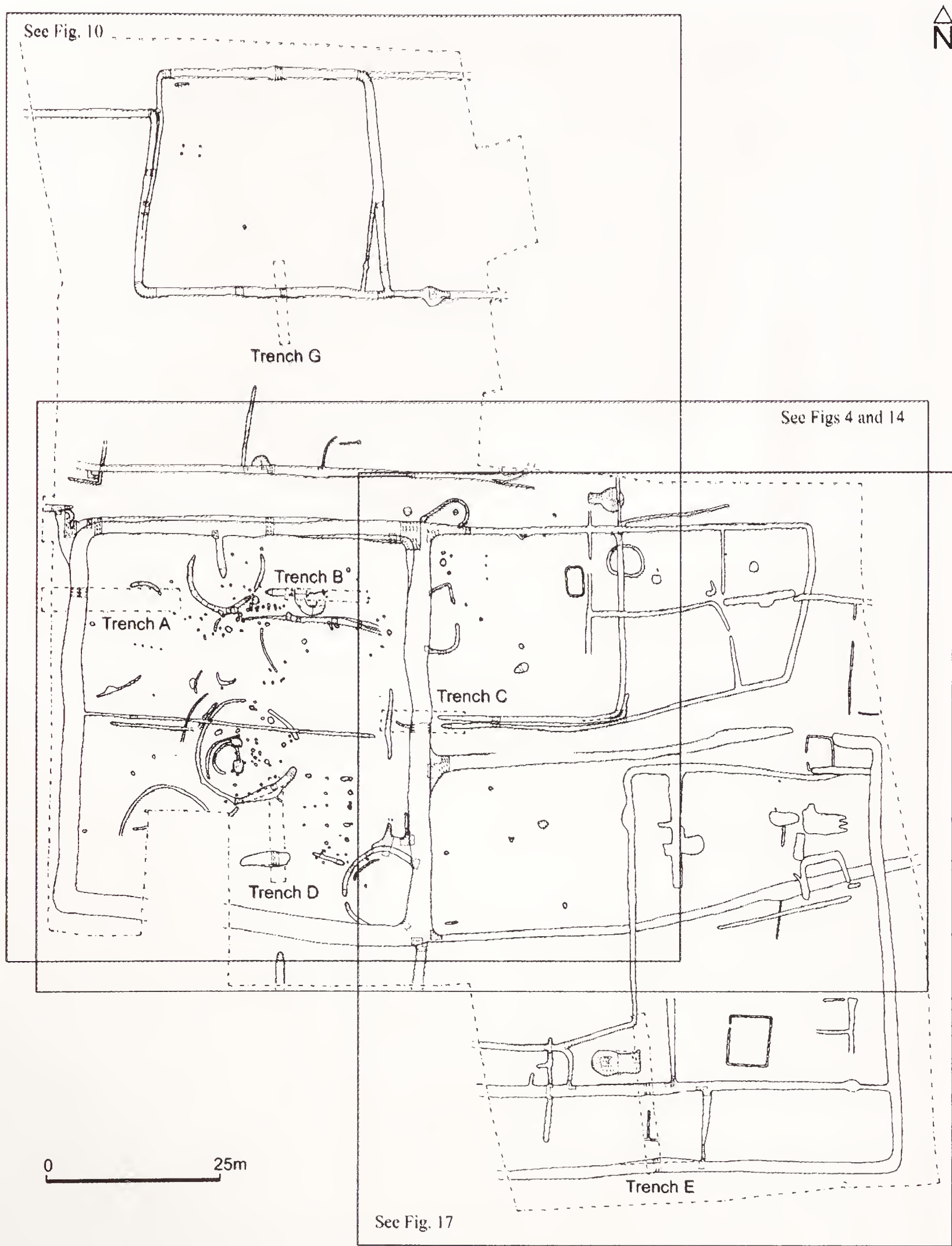


Fig. 3 Overall site plan showing Trenches A-G



## RESULTS

*By Ian Roberts with Luigi Signorelli*

Apart from the activity represented by an assemblage of early prehistoric flint (see pp. 101-104), four main phases of settlement activity have been identified. Most of the site phasing is based upon the stratigraphic relationships created by the development of a complex of ditched enclosures. In addition, the excavations identified a total of almost 200 discrete features, a large number of which have produced no dating evidence and cannot, therefore, be phased with any degree of confidence. In certain circumstances undated features have been phased on the basis of their association or spatial correspondence with other, more reliably, phased features. All recorded archaeological features are presented, although only those phased are highlighted on the individual phase plans.

## Phase 1

The remains of nine structures and three other features, of various size and form, represent this earliest phase of settlement activity. With one exception these are spread over an area of about 0.5 ha in the central part of the site, in what appears to be haphazard fashion (Fig. 4). The features do not appear to have been enclosed and there is no reason to suppose that they are all contemporary. They do, however, in ten cases, share common stratigraphic relationships with the enclosure ditches of the later Phases 2 and 3, whilst one other is cut by a Phase 4 ditch. Otherwise the features concerned may be phased only loosely on the basis of pottery dating and through their spatial non-conformity to the subsequent regimes of enclosure.

The largest and most notable structures are two roundhouses (Structures 1 and 14). Of the other structures and features attributed to this phase, eight were subject to detailed investigation (Structures 8, 10, 11, 19 and 29 and features 1069, 1078 and 1613), whilst Structure 30 received only token investigation and Structure 31 was not sampled at all.

## Structure 1 (Figs. 4 and 5)

Structure 1 was represented by a sub-circular ring gully with a diameter of 10 m. The circular plan was incomplete, the absent northern third giving it an open-sided horse-shoe plan. It was initially thought that the gully had been curtailed in order to respect the bank of the Phase 2 enclosure, the structure initially being interpreted as a small D-shaped enclosure measuring 10 m by 7.5 m in plan. Both spatially and stratigraphically however, this structure becomes problematic with respect to other features ascribed to Phase 2. The fact remains that this structure could represent an earlier sub-phase of Phase 2, but on the balance of evidence it has been included as a Phase 1 phenomenon. The defining gully was 0.6 m wide and 0.2 m deep and possessed a variable U-shaped profile (Fig. 5, S.137 and S.188). The northern segment apart, it was continuous except for a short 1 m wide interval in its south-eastern side. A large sample of this feature was excavated (almost 50%). Overall the fill of the gully produced a notable assemblage of 70 sherds of late Iron Age handmade pottery, mainly of the H2 fabric (pp. 85-87) and a small assemblage of mixed animal bone. None of the

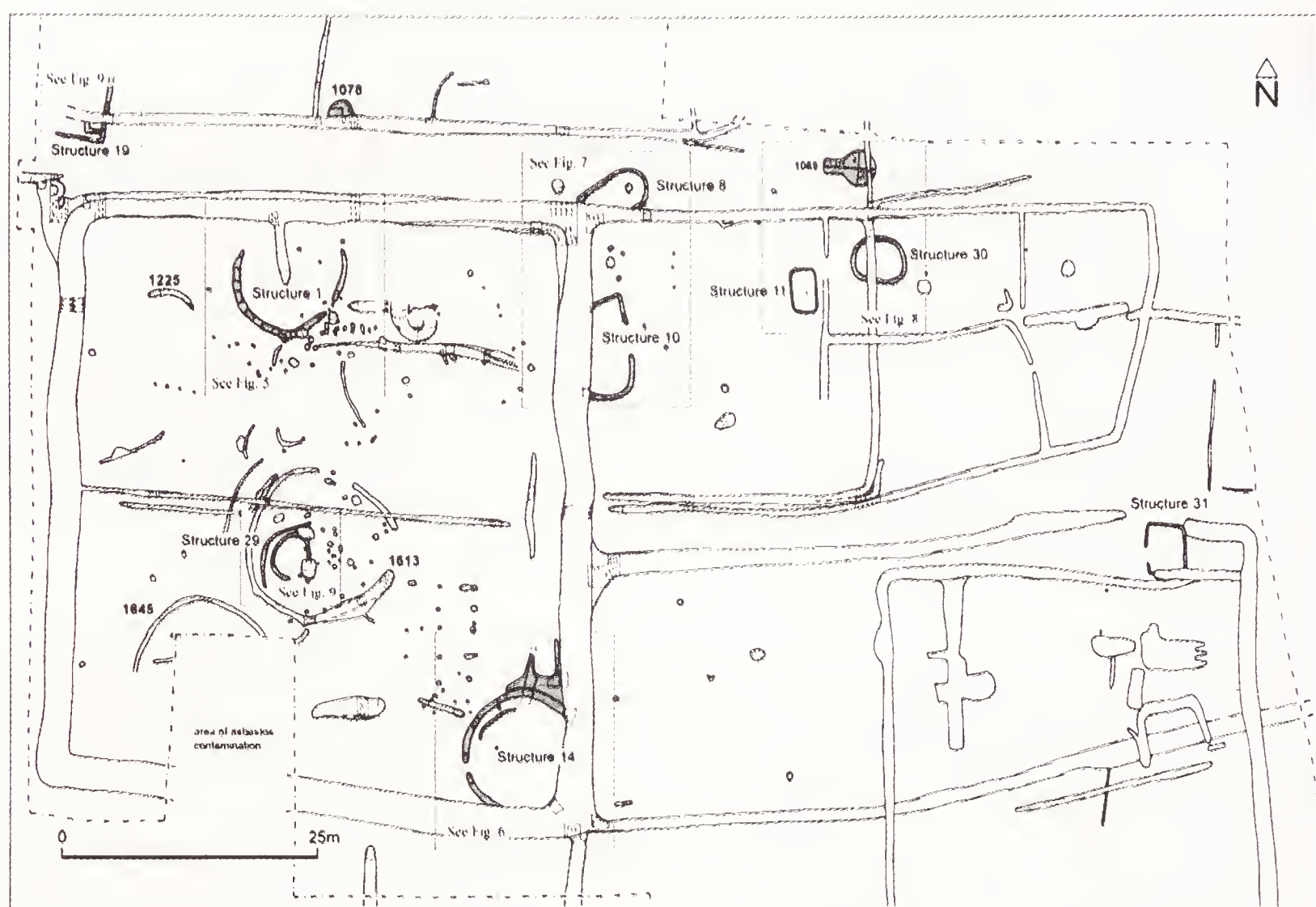


Fig. 4 Plan of the structures and features attributed to Phase 1

discrete features within the area of the ring gully lends itself to structural interpretation and it is by no means certain that these features are contemporary.

#### Structure 14 (Figs. 4 and 6)

The remains of a roundhouse, about 11 m in diameter, was found situated in the south-eastern corner of the main Phase 2/3 enclosure (Enclosure A/F). Only about two-thirds of its ring gully, which had a narrow 1 m interval in its western side, remained in plan. The gully had a flat-based U-shaped profile and measured approximately 0.75 m in width and survived to a depth of 0.35 m (Fig. 6, S.316 and S.317). Its fill produced a modest group of late Iron Age handmade pottery sherds, predominantly in H2 and H4 fabrics (pp. 85-87) and a few fragments of large mammal bone, as well as a small number of flint fragments. Internally, a narrower gully (1449), 0.45 m wide and 0.05 m deep (S.314), ran concentrically within 1 m of the main gully for a distance of almost 5 m. The fill of this feature produced only a single sherd of pottery and does not appear to have been open for general deposition like that of the larger outer gully and might therefore be regarded as the remains of a wall slot. On the northern side of this structure was a deposit of brown-grey silty clay (1674) lying between and beyond two parallel north-south gullies about 2 m apart (1721 and 1727), thought to flank the entrance. This deposit appears to have been disturbed by the roundhouse entrance and had embedded within it concentrations of rounded stones that may have served as a metalled surface at the entranceway. Deposit 1674 contained a large number of early prehistoric flint fragments (pp. 101-



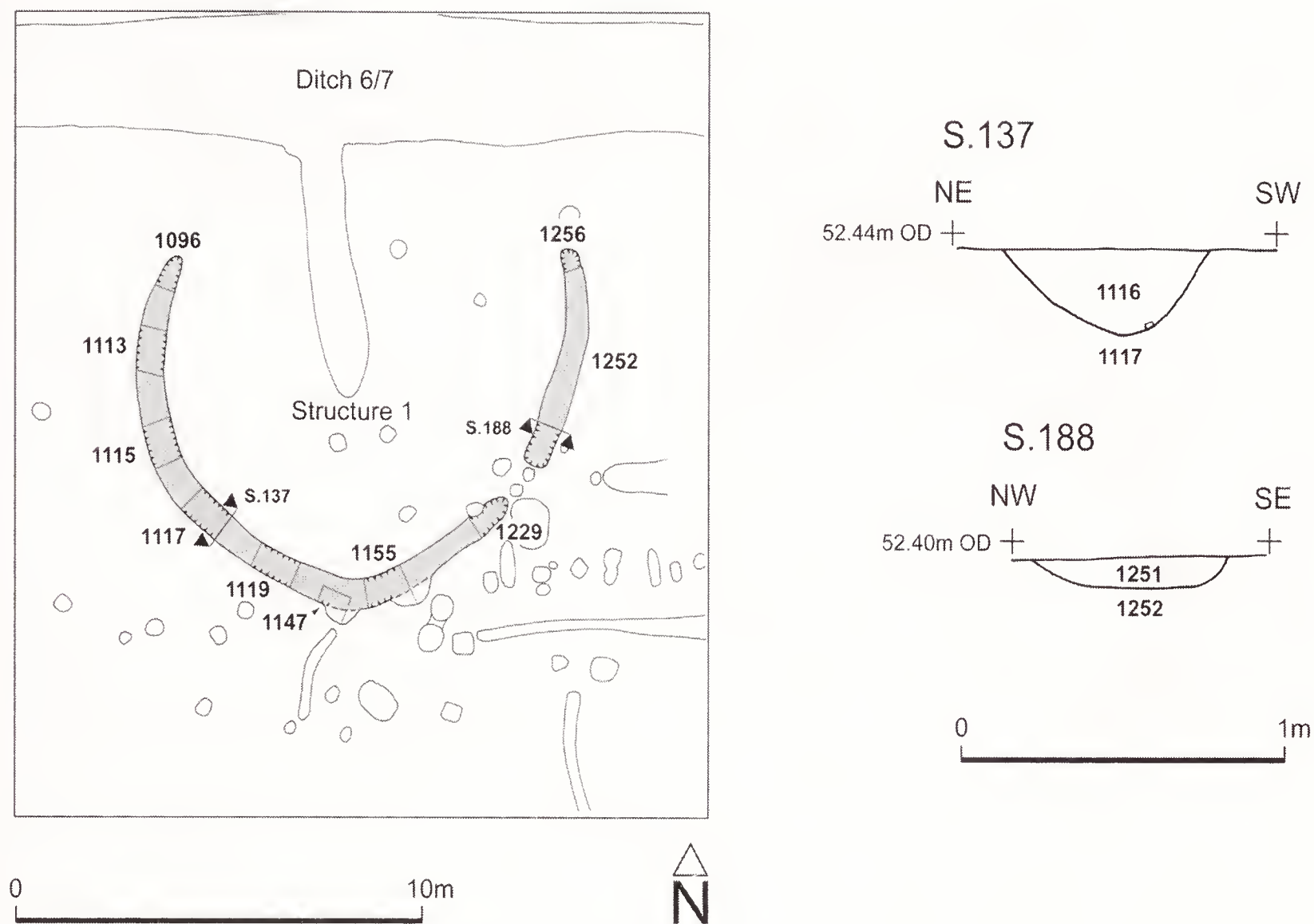


Fig. 5 Structure 1 (Phase 1): plan and sections

104) and a large number of pottery 'crumbs', possibly trodden into the deposit. The stratigraphic relationships between deposit 1674 and those associated with Structure 14 were confused, but it remains possible that this deposit, albeit disturbed, pre-dated Structure 14.

#### Structure 8 (Figs. 4 and 7)

Structure 8 represents what appears to have been the remains of a small rounded or apsidal structure or enclosure. It measured approximately 4 m in width and 6 m in length, and had had its south-eastern corner cut away by the ditches (7 and 9) of Enclosures F and G (Phase 3). It was orientated south-west/north-east and was defined by a flat-based, U-shaped, gully, 0.5 m wide and 0.2 m deep (Fig. 7, S.146 and S.149). The single gully fill yielded some 40 sherds of late Iron Age handmade pottery, predominantly in H2 and H4 fabrics (pp. 85-87). The central position of the only internal feature, pit 1082 (S.126), might indicate that it was associated with the structure, though it falls within an area where there are many un-phased discrete features.

#### Structure 10 (Figs. 4 and 7)

Two components, a northern right-angled gully and a southern curvilinear gully, have been supposed to form elements of the same irregular structure, the western side of which had been cut away by the eastern ditch of Enclosure F (Phase 3). It is

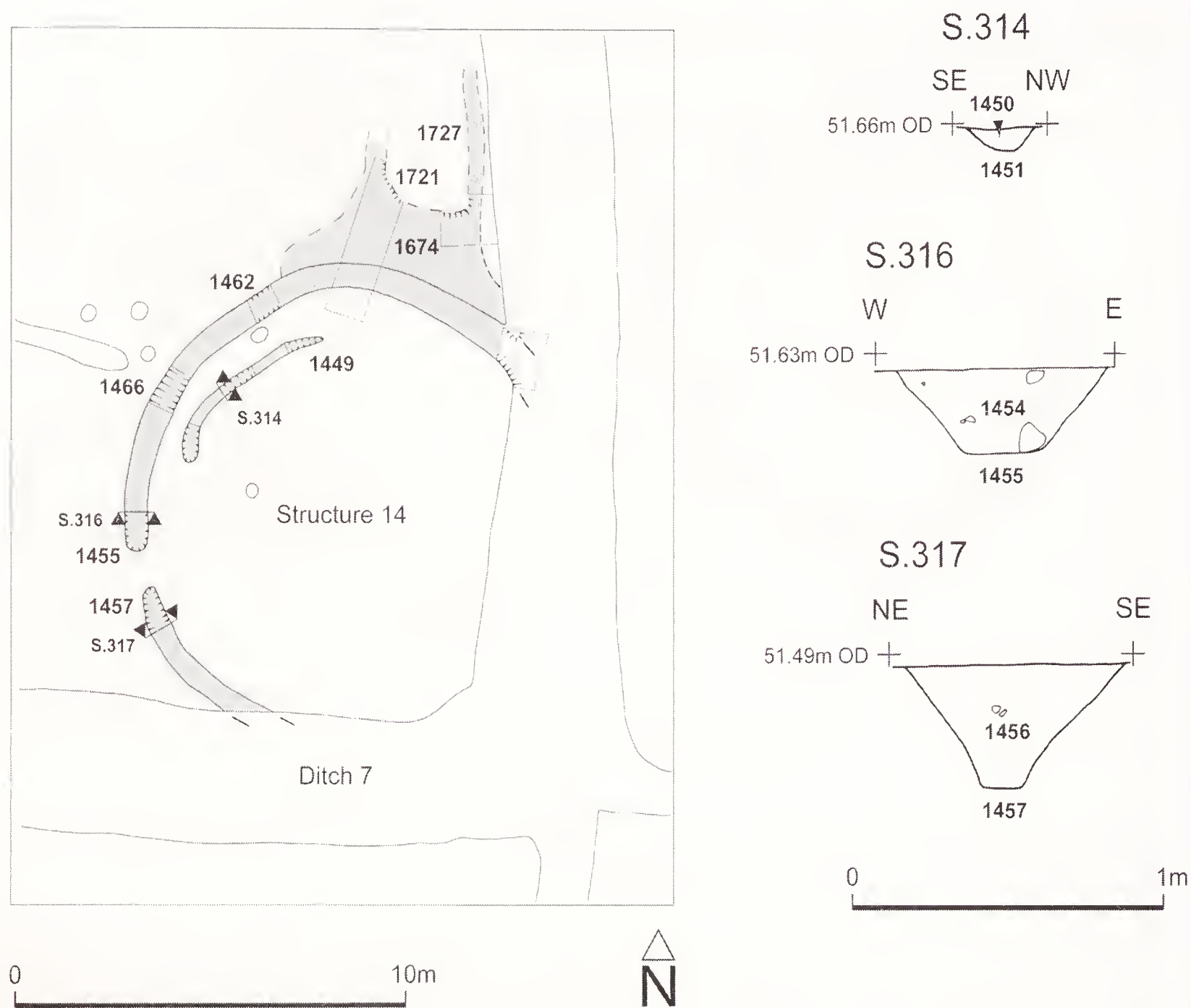


Fig. 6 Structure 14 (Phase 1): plan and sections

possible that the two components represent independent features, though if related they would seem to reflect a small irregular structure or enclosure measuring 8.5 m long and at least 4 m wide, with a possible 2.5 m wide eastern entrance. The gullies in both cases were U-shaped in profile and measured between 0.25-0.45 m in width and 0.15-0.3 m in depth (Fig. S.307 and S.309). Their fills produced four sherds of late Iron Age handmade pottery. No internal features were in evidence.

#### Structure 11 (Figs. 4 and 8)

This small, north-south orientated, sub-rectangular structure measured just 3.7 m by 2.3 m in plan. The narrow gully that defined it was without intervals and measured 0.2 m in width and up to 0.15 m in depth (Fig. 8, S.301 and S.303). The fill of the gully produced four sherds of late Iron Age handmade pottery. One internal feature, a post-hole (1441), produced no finds and might be associated, given the absence of other discrete features in the general area.

#### Structure 19 (Figs 4. and 9)

A right-angled arrangement of two gullies may represent a small structure or



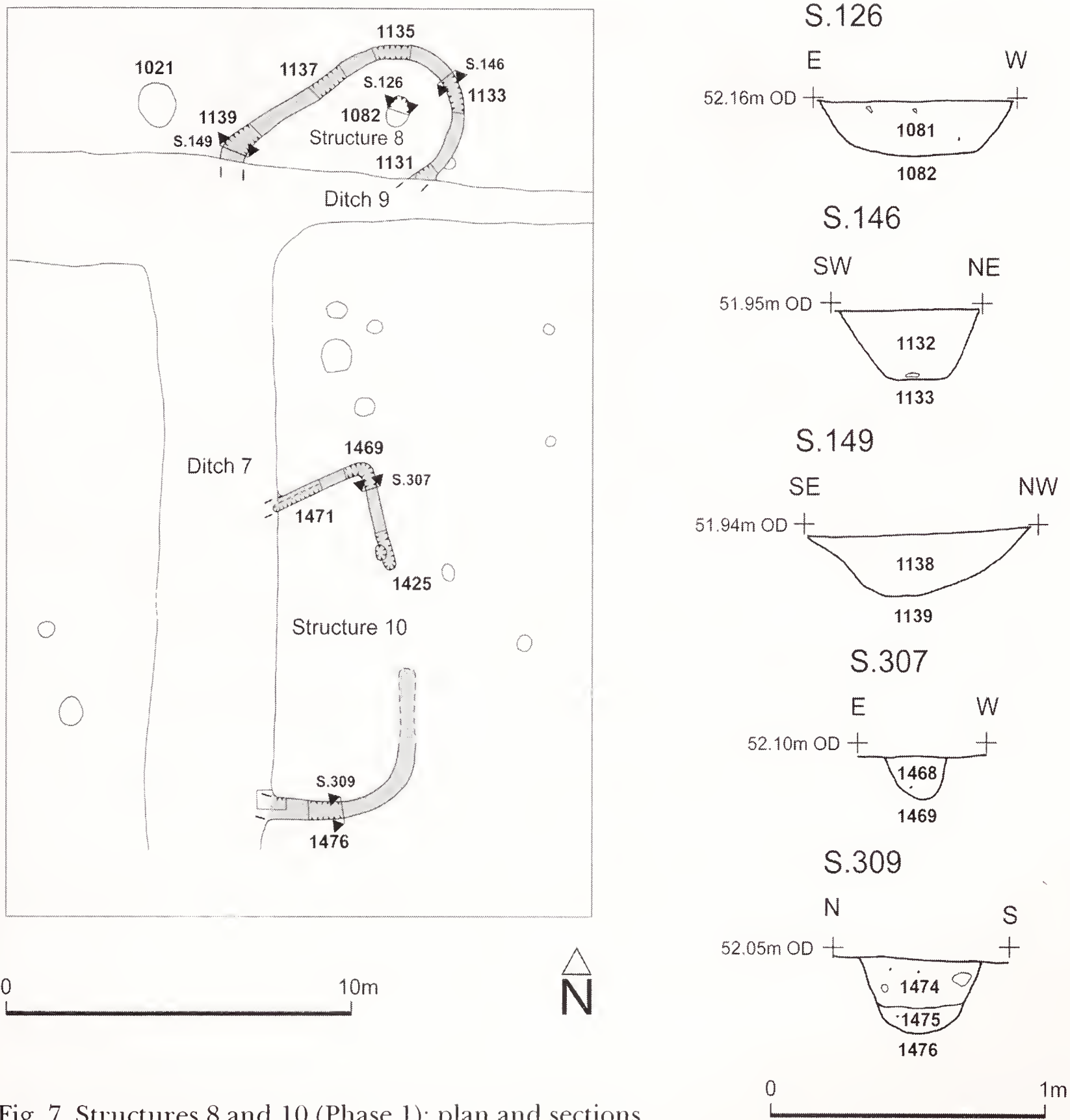


Fig. 7 Structures 8 and 10 (Phase 1): plan and sections

enclosure measuring at least 5.6 m by 3.5 m in plan. Another right-angled intersection of shorter gullies may represent an internal feature or subdivision. The gullies measured between 0.3-0.5 m in width and were up to 0.2 m in depth (S.106 and S.119). Their fills produced no finds and had been cut by the Phase 2 ditch (Ditch 4) that formed the southern side of Enclosure D (see below).

Feature 1069 (Figs. 4 and 8)

A large pit with a key-hole shaped plan had been cut by the eastern ditch of Enclosure E (Phase 2; ditch 1509). The main body of the pit had a diameter of 3.4 m and was vertically sided to a depth of 0.94 m. There was no evidence of a lining and the pit contained two fills (Fig. 8, S.327 and S.328). The primary fill, a dark brown silty clay with yellowish bands of clay with gravel (1507), was about 0.6 m deep and

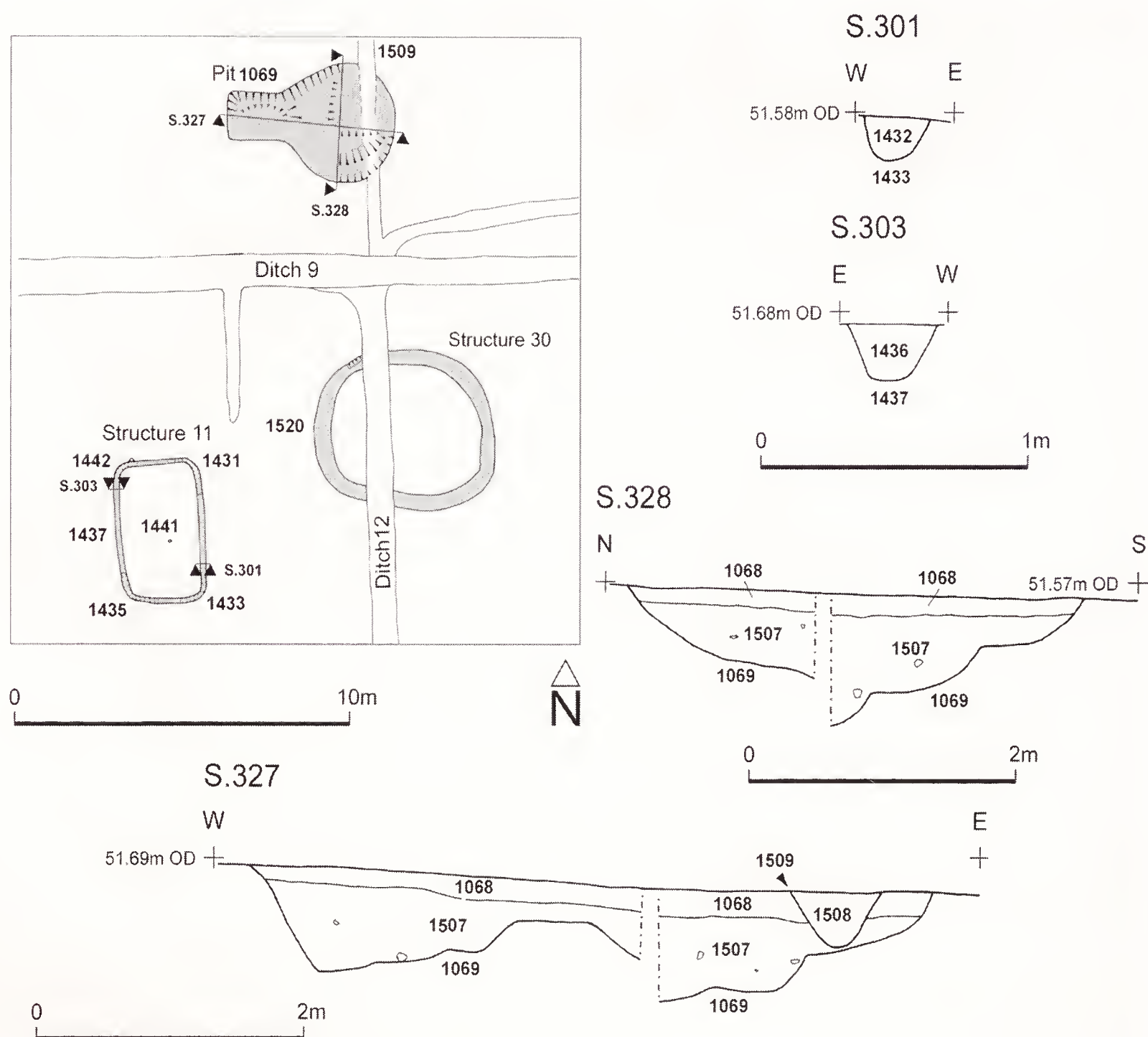


Fig. 8 Structures 11 and 30 and Pit 1069 (Phase 1): plan and sections

produced a large assemblage of pottery, but little else. Over 200 sherds of pottery were recovered, 80% of it being late Iron Age handmade material, predominantly of the H2 fabric, the remainder being Roman, including fragments from two rusticated jars (p. 88). A 0.2 m deep dark grey-brown silt (1068) formed the secondary fill which produced only eight sherds of pottery and some residual flints. The western side of the feature was formed by a rectangular appendage that gave it its key-hole plan, and the overall appearances of a kiln or oven flue. This rectangular 'flue' was 1.9 m in length and 1.4 m in width and was cut into the natural clay to a maximum depth of almost 0.8 m. The base of this cut rose and narrowed at the eastern end, such that where it met the pit its base was only 0.2 m wide 0.3 m deep. This effectively had formed a step that separated the pit and the gully/flue. Despite its form, however, the feature displayed no evidence of burning or heat reddening and its function remains uncertain. It is concluded that this feature could have been created as an oven but never functioned as such.



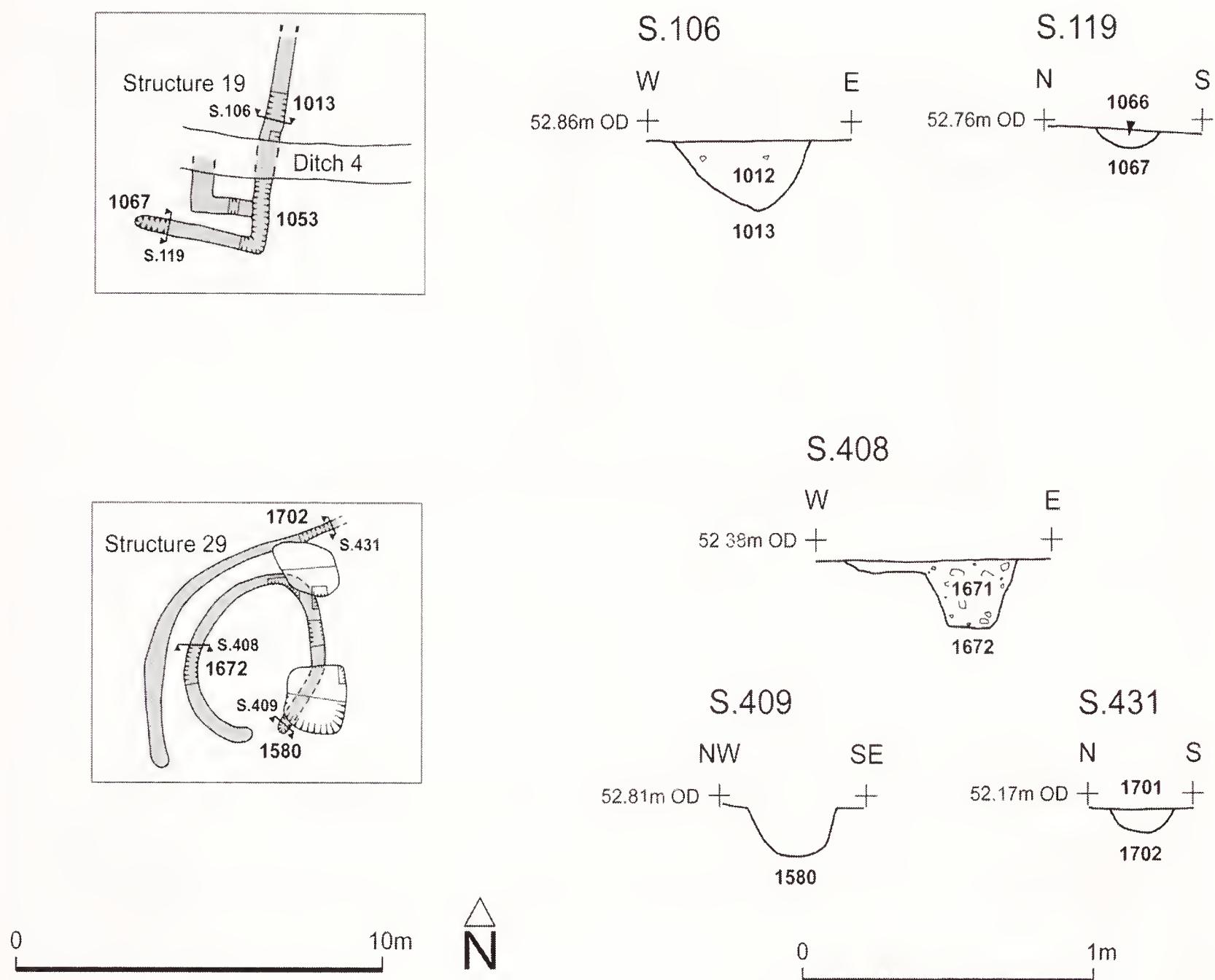


Fig. 9 Structures 19 and 29 (Phase 1): plans and sections

### Structure 29 (Figs. 4 and 9)

A small oval-shaped structure (1672) measured approximately 3.7 m by 4 m in plan. Its defining gully had an interval at least 0.7 m wide in its southern side which might reflect an entrance. A further gully (1702) appears to respect the north-western side of the smaller structure and is almost certainly associated. Both features are up to 0.5 m in width and 0.15 m deep (Fig. 9, S.408, S.409 and S.431). Their fills in both cases did not produce any finds. These features fall within the area of the Phase 2 roundhouse (Structure 17), are cut by the pits (1584 and 1649), but interpreted as being elements of that structure (see below). Possibly associated with this structure is a post-hole (1602), which had also been cut by pit 1584.

### Structure 30 (Figs. 4 and 8)

A small sub-circular structure, measuring 4.5 m by 5.2 m, was defined by a continuous gully (1520) up to 0.5 m in width. Only a token amount of the gully fill was excavated in order to ascertain its stratigraphic relationship with the eastern side of Enclosure E (Phase 2; ditch 1521), which was found to have cut it. This limited investigation revealed the gully to be almost 0.3 m deep and to have a U-shaped profile.





## Structure 31 (Fig. 4)

This small rectangular enclosure, measuring 4.3 m by 3.5 m in plan, was located at the eastern extremity of the site. It was defined by a gully 0.25 m wide, and had a 1.3 m wide interval in its western side. No internal features were in evidence. This structure was not investigated in detail, though in plan it was clear that its gully had been cut by one of the ditches ascribed to the Phase 4 activity on the site. The structure is essentially un-phased but has been attributed to this phase largely because of its similarity in size and form to other Phase 1 structures and because spatially it does not have any obvious associations with the enclosure regimes of Phases 2 or 3.

## Pit 1078 (Fig. 4)

A sub-circular pit measuring 1.6 m in width, 2.55 m in length and 0.75 m deep, had been cut by the southern ditch of Enclosure D (Phase 2, 1080; Fig. 10). This pit was filled by a single deposit (1077), which produced 18 sherds of Iron Age hand-made pottery, mainly in H2 fabric, and four sherds of Roman greyware (pp. 87-88), along with a number of worked flints.

## Pit 1613 (Figs. 4 and 11)

A sub-circular pit had been cut by the southern gully terminal of the east-facing entrance of the Structure 17 roundhouse (Phase 2). The pit, which measured 1.2 m in diameter and 0.9 m in depth, contained two fills (Fig. 11, S.382). The primary fill (1612) produced no pottery but over 50 fragments of animal bone. By contrast the secondary fill (1611), yielded a good assemblage of 69 Iron Age handmade pottery sherds, mainly in H1 fabric (pp. 86-88), and over 100 animal bone fragments. The animal bone from the pit generally was a mixture of mainly cattle-sized and sheep/goat-sized fragments.

## Phase 2

## Enclosure A

The second phase of activity saw the creation of a ditched enclosure complex, the principal component of which was Enclosure A, a large, almost square, enclosure with maximum internal dimensions of 53 m by 48 m. The large ditch which defined Enclosure A (Ditch 6) had largely been cut away by the Phase 3 redefinition of the enclosure, although it did survive partially in plan on the northern side where the Phase 3 re-cut had not been so comprehensive. Sufficient of Ditch 6 survived to ascertain that it had measured at least 1.3 m in width and up to 0.75 m in depth, and to have possessed an irregular U-shaped profile (Fig. 12, S.121 [1068] and S.139 [1111]). The lower dark brown silty primary fills of the ditch were up to 0.2 m thick, whilst the upper greyer, clayey fills were up to 0.6 m thick. The ditch's fill produced over 100 sherds of later Iron Age handmade pottery in the various identified fabrics, as well as four sherds of Roman material, including rusticated ware and a fragment of a 2nd-century campanulate bowl (p. 90). A notable assemblage of some 50 cattle and cattle-sized animal bone fragments and a number of worked flints were also recovered. The vast majority of the finds were found in the secondary ditch fill at the north-eastern corner of the enclosure.

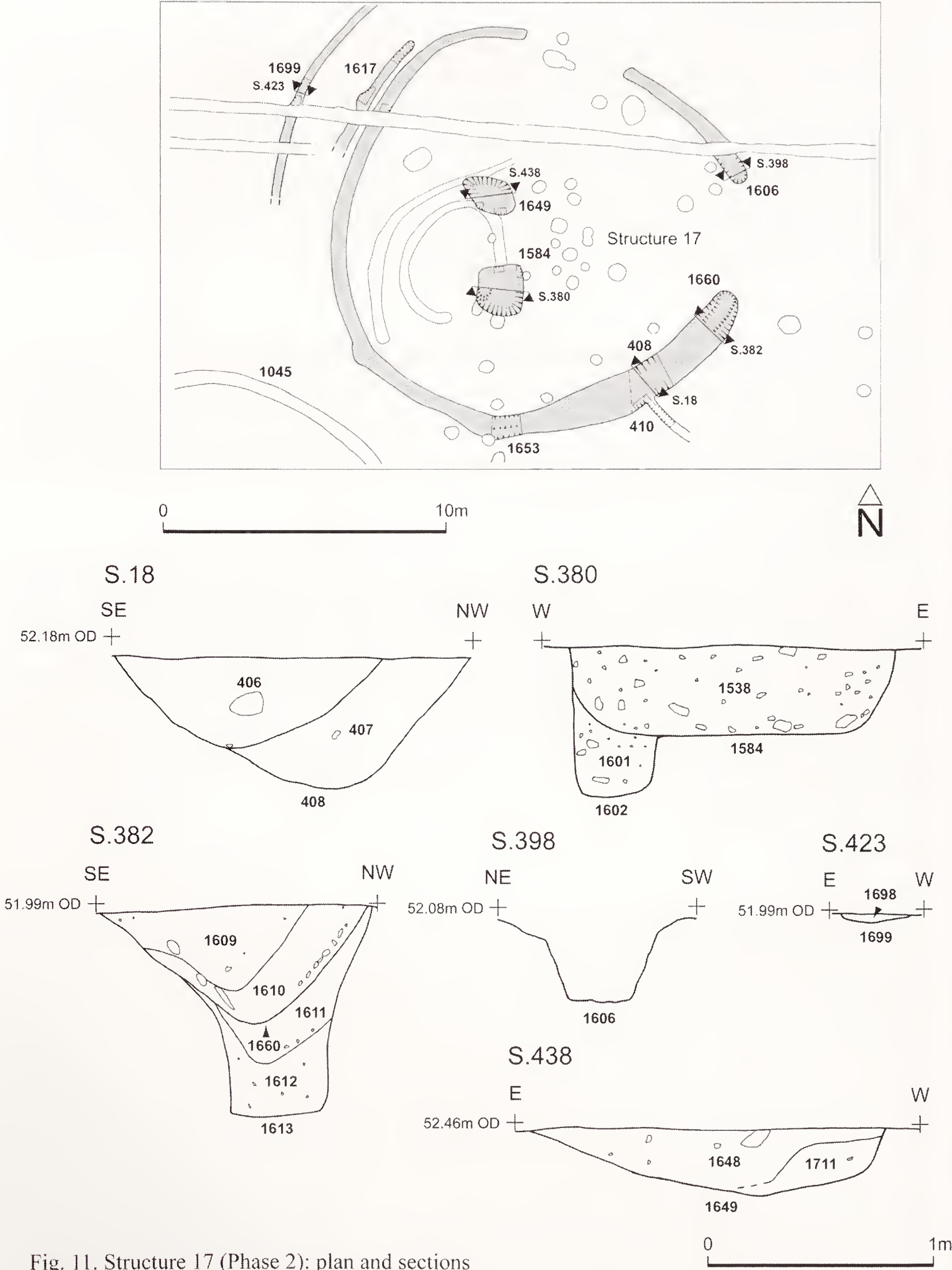


Fig. 11. Structure 17 (Phase 2): plan and sections



## Structure 17 (Figs. 10 and 11)

The interior of Enclosure A was occupied by a central roundhouse, represented principally by a circular gully with a diameter of c.13 m. The gully varied in width between 0.35-0.65 m and was up to 0.6 m deep with a U-shaped profile (Fig. 11, S.18 and S.382). Two intervals, each of about 3 m, were located on the northern and eastern sides of the ring gully, though it is the eastern one, where the plan of the structure projects to give it a slightly ovate form, that appears to have been the more formal entrance. The gully fill produced 27 sherds of Iron Age handmade pottery and a large animal bone assemblage. Almost 250 fragments of animal bone were recovered, the majority being from cattle or large mammals, although there was also a significant sheep/goat presence. Interestingly the bones were not only the product of food preparation and consumption, some being associated with primary butchery that might normally be expected to take place on the settlement periphery (p. 116).

Although there are over 30 discrete features, mainly post-holes, that fall within the area enclosed by the roundhouse gully, none of these readily translates convincingly into elements normally associated with roundhouses. The lack of finds from most of those that were excavated is equally unhelpful and it is conceivable that some are associated with the small structure represented by Structure 29 (Phase 1: Fig. 4). At best the post-holes may be indicative of a succession of uprights in the central area, presumably to support the roof frame. An arc of six internal post-holes around the south-eastern quarter of the structure might be a remnant of a wall line, but overall the post-holes do not provide any coherent symmetrical pattern. The roundhouse gully may itself reflect a wall line of the structure, in which case the shallow concentric gullies (1699 and 1617), preserved to the north-west only, probably represent drip gullies (see Fig. 11, S.423), rather than a succession of structures on the same site.

Two features that might reasonably be associated with Structure 17 are the large sub-rectangular pits (1584 and 1649). These lie on a north-south axis, 2 m apart and slightly south-west of the centre of the enclosed area. Pit 1584 measured 1.8 m by 1.6 m, whilst 1649 was 1.4 m by 1.5 m. The depths of both were relatively shallow, being respectively 0.4 m and 0.35 m, and it is therefore unlikely that they could have supported earth-fast uprights that acted as the principal members of the support frame for the roof of the structure, and certainly no post-pipes were in evidence (Fig. 11, S.380 and S.438). It is possible that they contained large support pads; otherwise their association with Structure 17 is tenuous. Together they produced a small assemblage of Iron Age handmade pottery.

On the basis of cross-contextual links in the pottery assemblage, pit 1055 is a possible contemporary of Structure 17. This large elongated pit, to the south of the roundhouse, lay on an east-west alignment and measured 7.3 by 2.2 m in plan. It was up to 0.75 m deep (Fig. 13, S.10) and its fill yielded a large group (148 sherds) of Iron Age handmade pottery sherds, predominantly (89%) the H1/H4 fabric type (pp. 86-90), along with a smaller assemblage of mixed animal bone.

## Pits 1153, 1259 and 1735 (Figs. 10, 11 and 16)

Three pits found in the northern part of Enclosure A might be regarded as a

contemporary group on the basis of their similar content, namely large quantities of sheep/goat bones, although other animal bones and artefact types were also recovered. Their phasing relies upon their group status; Pit 1153 having cut the in-filled gully of Structure 1 (Phase 1), whilst Pit 1259 was cut by the ditch defining the south side of the Phase 3 sub-enclosure. Pit 1735 was isolated and its phasing relies entirely upon a perceived association with the other two pits.

Pit 1153 measured 0.95 m by 0.75 m in plan and was 0.2 m deep (Fig. 16, S.156). Its fill (1152) is notable for containing 687 fragments of animal bone, with those of sheep and pig being positively identified. The bones represent some partial animal skeletons and could be part of a feasting deposit (p. 116). Thirteen pottery sherds, mostly of native type, but with some Roman greyware present, and a small amount of ironworking slag were also recovered from the pit.

Pit 1735, situated immediately to the south of Pit 1153, measured 1 m by 0.55 m in plan and had a flat base at a depth of 0.2 m (Fig. 16, S.445). Its fill contained an assemblage of animal bones notable for the number of sheep metatarsals possibly associated with bone working (p. 116). No other finds were recovered.

Pit 1259 measured 0.85 m by 0.55 m in plan and was 0.6 m deep (Fig. 16, S.194). Three fills were identified, the secondary fill (1261) being notable for being rich in charcoal, ash and daub, with some carbonised cereal grains. Mainly, however, it is notable for containing over 4000 small fragments of burnt bone, most of which were identified as sheep/goat (or were sheep/goat-sized), with a smaller quantity of pig (p. 116). The plant remains from the primary fill (1272), notably a large number of carbonised cereal grains, suggest that it may have initially been used as a storage pit, and subsequently as a rubbish pit, when it first received fill 1261, and then the upper fill (1260), which contained the burnt rubbish from cereal processing and the remains of fuel such as peat and turf (p. 120). Three sherds of pottery were recovered from the pit, the most diagnostic being a mortarium fragment that probably dates to the 2nd century AD (p. 87).

#### Enclosures B-E (Figs. 10 and 13)

Enclosure A seems to have co-existed with a series of ditch-defined enclosures or fields that were appended to it. The combined geophysical and excavation evidence indicates that these field systems extended beyond the site boundaries to the west, east and south. The stratigraphic relationship between Enclosure A and the westward running ditch 1198, at its north-west corner, was confused by a large tree pit (1283), although sufficient survived to suggest that there had been a gully (1285) linking the enclosure with ditch 1198. It is, however, to the north and north-east of Enclosure A that the evidence for the enclosure/field system has survived best. The enclosure system is seen as a secondary development to the principal enclosure and there is evidence of a redefinition and realignment of some of the ditches. Nevertheless, as the basic lay-out of the regime did not radically change, and given the limited dating resolution available, there is deemed little cause to resort to additional phase discrimination in documenting these enclosures.



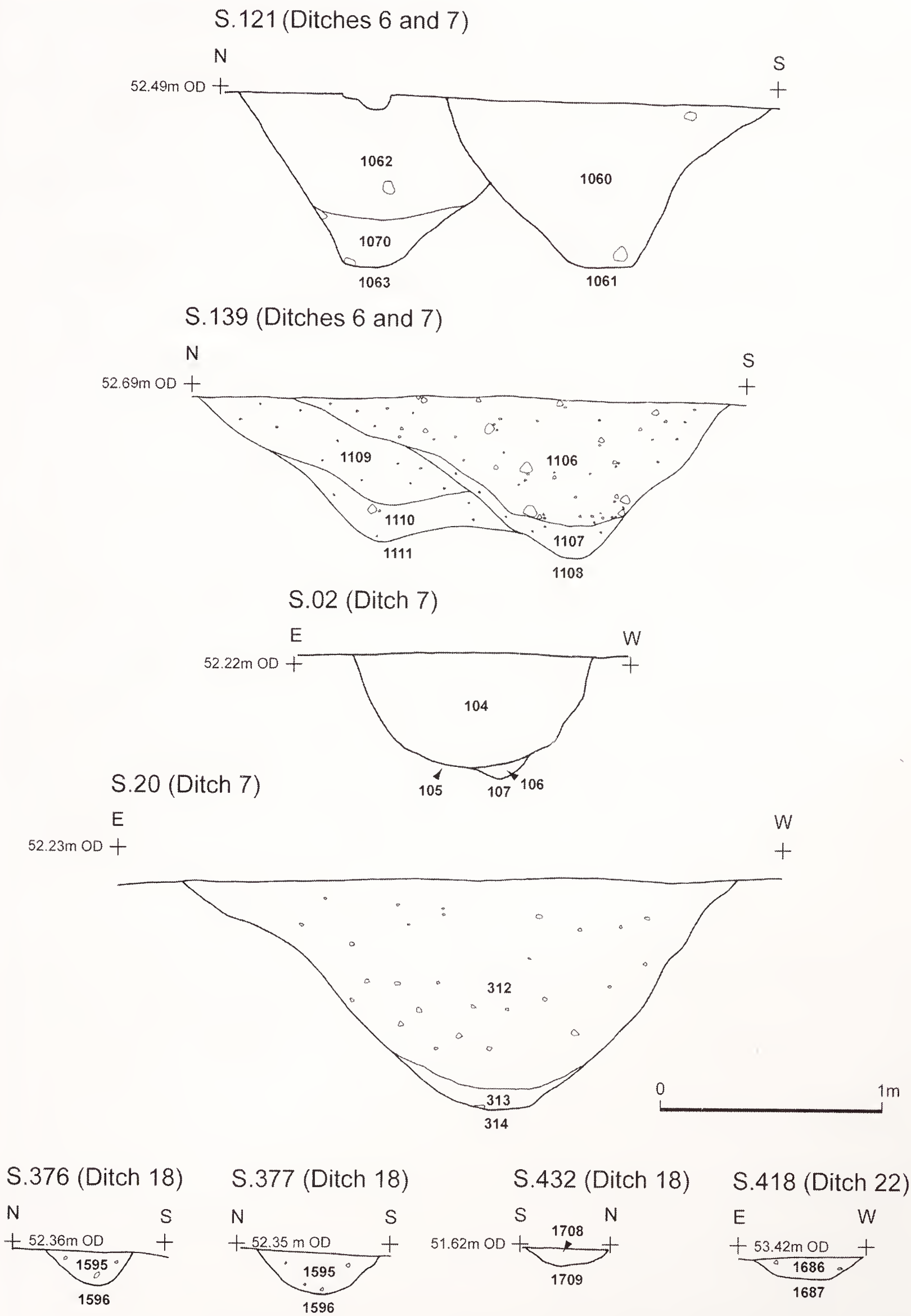


Fig. 12 Enclosure A (Phase 2) and Enclosure F (Phase 3) ditch sections

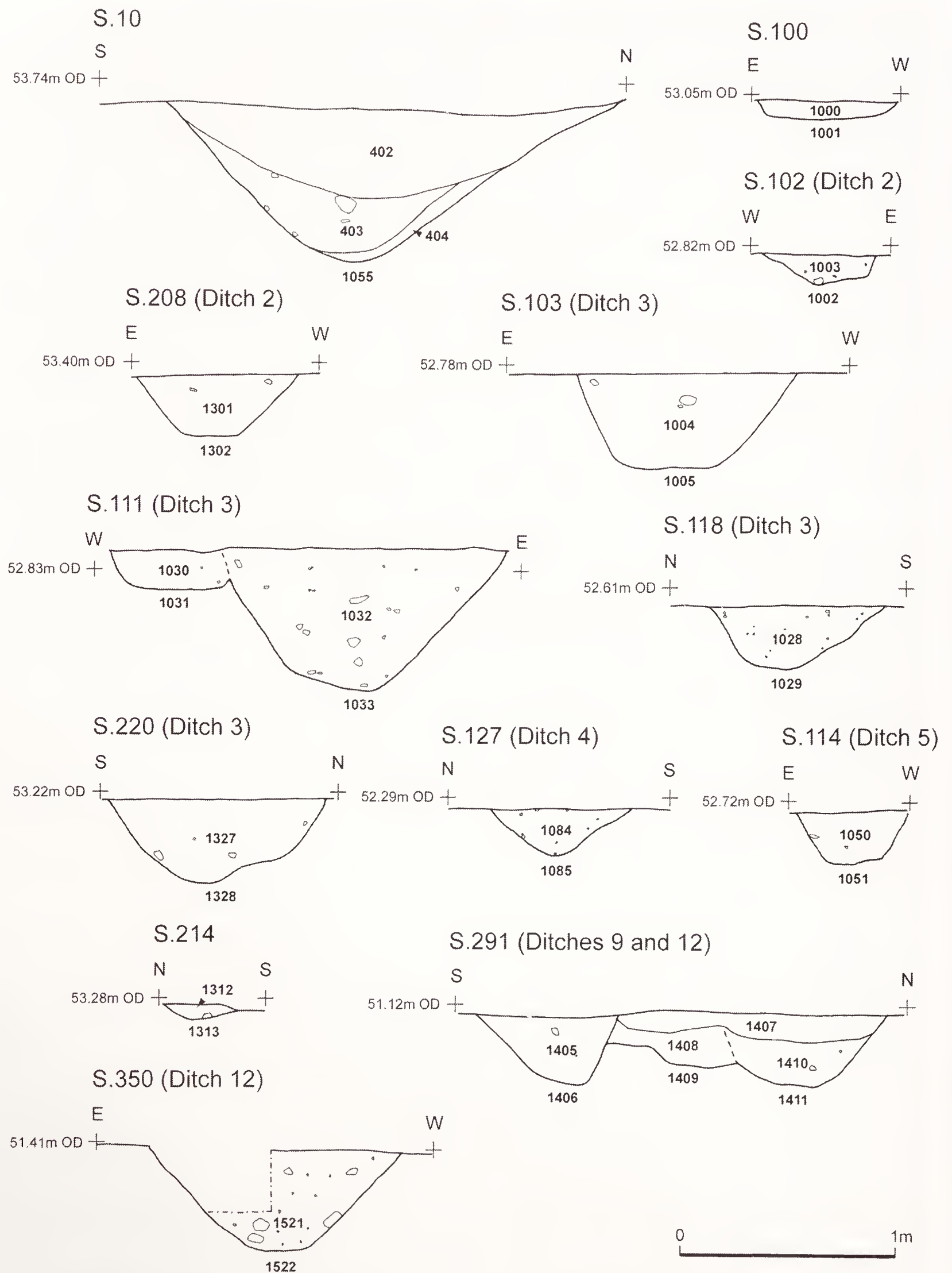


Fig. 13 Enclosures B, C, D and E (Phase 2): ditch and feature sections



## Enclosures B and C (Figs 10 and 13; Plate 1)

These enclosures were located immediately to the north of Enclosure A. The only enclosure that was fully revealed was Enclosure B, which measured approximately 32 m by 30 m in plan. It seems originally to have existed as the westernmost of two enclosures in the northern part of the site, connected on its western side to a ditch entering the site from the west and forming the north-western boundary of Enclosure D. The western and eastern sides of the Enclosure B (Ditch 2; 1317 and 1002) appear to have been dog-legged initially. At some later point the enclosure was remodelled and a new continuous enclosure ditch cut (Ditch 3). Whilst the new ditch adhered to the general plan of the original enclosure (and its linking ditch to the west), it also straightened out the western and eastern sides of Enclosure B, effectively widening the width of the south side by 3 m to give the enclosure an overall trapezoidal plan. At the north-west corner of the enclosure there appears to have been a 4 m gap in the new realigned ditch, which suggests that this may have become the entrance into the enclosure.

Enclosure C, to the east, was not fully exposed. If its eastern side coincided with a northward extrapolation of Ditch 12 (i.e. the eastern side of Enclosure E) then it would have had very similar dimensions to Enclosure B. The southern side of Enclosure C is notable for a large pit-like feature (1086), which, despite the recovery of finds from its fills, excavation suggests was probably the irregular disturbance caused by a former tree position.

The ditch that initially defined Enclosure B (Ditch 2) was between 0.4-0.8 m wide and survived to a depth of up to 0.4 m (Fig. 13, S.208 and S.102). The re-cut ditch (Ditch 3) was significantly larger, being generally 1.2 m in width and up to 0.6 m in depth (Fig. 13, S.103 and S.111). The fills of the earlier ditches produced relatively few finds. By comparison the fills of the re-cut Ditch 3 produced over 100 sherds of Iron Age handmade pottery, predominantly of H2 and H4 fabric type (pp. 86-88). This greater yield was partially due to the greater survival of the later ditch, but pro rata the increase in finds recovery is marked.

The greater incidence of artefacts in the later Ditch 3 would suggest that it corresponded to a change of use, however, there is no evidence of intense activity within either Enclosure B or C, as represented by archaeological features. Indeed, only Enclosure B displayed any evidence of internal features in the form of five pits/post-holes and a single linear feature, none of which should necessarily be seen as contemporaneous to the enclosures. Only pit 1001 in the central southern half of Enclosure B produced any finds, these being a mere handful of Iron Age pottery sherds, ceramic building material, flint and animal bone. This shallow pit was 0.6 m in diameter and only 0.1 m deep and, like all other features in this enclosure, contained a dark grey brown silty fill, but neither its morphology or finds content suggests any specific function (Fig. 13, S.100). The fact that the 2 m by 0.3 m linear feature (1313), in the north-west corner of the enclosure lies parallel to the northern ditch may be indicative of it being contemporaneous, but its size and 0.07 m depth and broad U-shaped profile are not indicative of a function (Fig. 13, S.214). Only the four pits/post-holes (1292, 1294, 1296 and 1298) appear to offer an array indicative



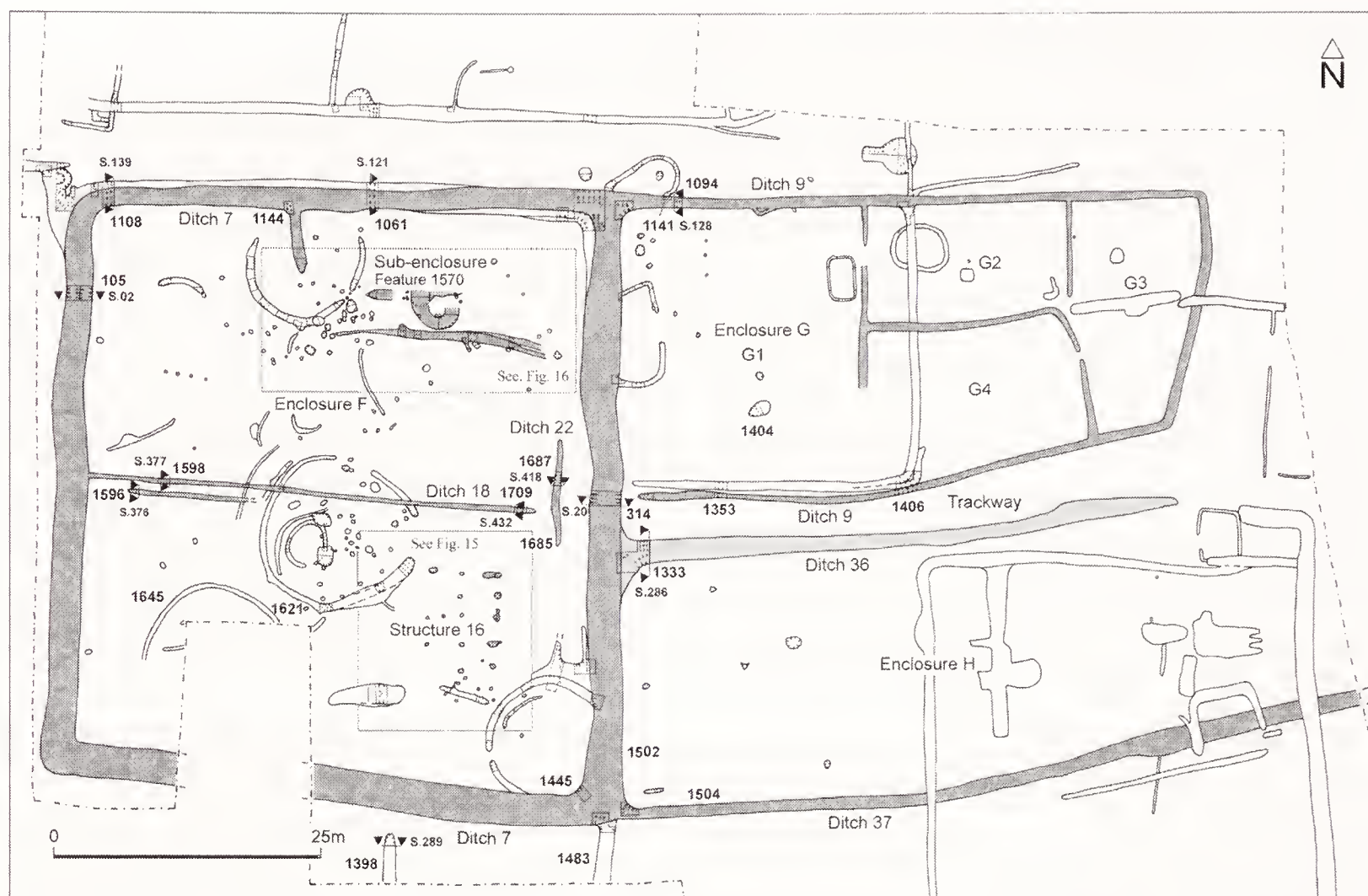


Fig. 14 Plan of structures and features attributed to Phase 3

of a function. These features, each about 0.45 m in diameter and 0.1 m in depth form a rectangular plan measuring 2.75 m by 1.6 m, which might be viewed as a four-post structure, typically interpreted as the supports for raised granaries or hay rucks.

#### Enclosure D (Figs. 10-13)

From the excavated evidence Enclosure D is manifested as an L-shaped enclosure enveloping the western and southern sides of Enclosure B. The eastern extent of Enclosure D is unknown, but it is speculated that it may well have terminated in line with the northward extrapolation of Ditch 12 of Enclosure E, although there is nothing in the geophysical survey data to confirm this (see Fig. 2). As revealed, Enclosure D measured 62 m east-west and 50 m reducing to 25 m north-south. The south side of the enclosure was defined by Ditch 4, which ran parallel to the north side of Enclosure A to form a 6 m-wide trackway. Ditch 4 was between 0.8-1.3 m wide and up to 0.4 m deep (Fig. 13, S.127), its fill yielding a very small quantity of handmade and Roman pottery, including rusticated ware (p. 90). At its eastern end the ditch was bifurcated in plan showing it had been re-cut on a slightly different alignment. Although the northernmost strand of the ditch veered beyond the edge of the excavated area, the southernmost strand terminated 12 m from Ditch 12, suggesting that there had been a wide access point here from the trackway, and possibly Enclosure E to the south.

An 11 m long north-south ditch (Ditch 5) ran north from Ditch 4 about 25 m from the western edge of the excavation. This had seemingly provided a partial subdivision of Enclosure D. Although somewhat smaller, being only 0.5 m wide and 0.25 m deep



(Fig. 13, S.114), Ditch 5 produced a notable assemblage of pottery comprising over 50 sherds of Iron Age handmade pottery, predominantly of H2 fabric type (pp. 86-88), suggesting that it may have lain close to an activity area. Only three other features were identified within Enclosure D and all lay immediately to the east of Ditch 5, where potentially the focus of activity had been. These included two shallow linear gullies (1072 and 1011) and a pit (1009), all of which were very shallow (less than 0.1 m) and offer little scope for interpretation.

#### Enclosure E (Figs 10 and 13)

Enclosure E was a rectangular enclosure measuring 33 m by 27 m, that was appended to the northern half of the eastern side of Enclosure A. The enclosure was defined by Ditch 12, which measured 1 m in width and 0.4 m in depth. Aspects of this enclosure point to a more complex evolution, such as the earlier angled ditch terminus (1409) seen at the south-eastern corner and the divergence of perhaps three ditches (1509, 1524 (not illustrated) and 1558) at the point where the subsequent Enclosure G ditch intersects (Ditch 9; Phase 3). Indeed, although the evidence here is scant, there is a suggestion that Enclosure E existed as a square enclosure, distinct from the trackway to the north, its original northern ditch having been almost entirely obliterated by the re-cutting of the northern side of Enclosure G. Conceivably, ditch 1558 might be a remnant of the original eastward extension of the trackway prior to the creation of the north-south ditch, 1509.

Ditch 12 produced only a small amount of Iron Age handmade pottery and a few flint fragments. Its earliest manifestation, as Ditch 1409, was of similar dimensions, although slightly shallower than the later cut (1411) (See Fig. 13, 291 and S.350). Although only a small segment of the ditch was excavated its fill produced ten mainly Iron Age pottery sherds, but including a small number of Roman greyware fragments. The nature of ditches 1524 and 1558 was not fully ascertained, but ditch 1509 was found to be only 0.2 m deep (Fig. 8, S.327), its fill producing just a single sherd of Roman greyware.

#### Phase 3

The third phase of activity saw the reorganisation of the site within and around the principal enclosure. As well as a reorganisation of the interior of the main enclosure (now Enclosure F), the site was also reoriented with the creation of new secondary enclosures appended to the eastern side of the main enclosure and, potentially, the abandonment of the earlier enclosures (B-D) to the north.

#### Enclosure F (Figs. 14 and 16)

The basic plan of Enclosure A (Phase 2) seems to have been retained and the original ditch re-cut on the same plan. The new enclosure (F) was defined by Ditch 7, a massive U-shaped cut of similar proportions to its predecessor (Ditch 6; Phase 2). Where identified, the lower primary fill of the ditch was a dark brown silty clay, up to 0.15 m in thickness, which was overlain by a similar but greyer secondary fill up to 0.55 m thick (Fig. 12, S.02, S.20, S.121 and S.139). Overall the ditch produced over 370 sherds of Iron Age handmade pottery in all the various fabric types (pp. 85-88)

as well as a small amount of Roman rusticated ware, perhaps of late 1st-early 2nd century date, as well as part of a flanged bowl of 2nd century date (p. 91). A notable assemblage of cattle or cattle-sized animal bone (170 fragments) was also recovered, the vast majority having been recovered from the upper ditch fills (p. 118).

Internally the enclosure was subdivided into two equal halves by a partition in the form of the shallow Ditch 18 (0.2 m deep), which ran continuously from the western side of the enclosure to terminate 5 m from the inner edge of the eastern enclosure ditch. A shorter ditch (1596), 12 m long, but otherwise of similar proportions to Ditch 18, was found running parallel to and 1 m to the south of it and is assumed to be contemporary (Fig. 12, S.377, S.376, S.432).

The shortfall of Ditch 18 at its eastern end was probably in order to accommodate Ditch 22, a 10 m long, north-south ditch, 0.15 m deep, running parallel to the enclosure ditch and at right angles to the enclosure partition (Fig. 12, S.418). The purpose of Ditch 22 is not fully apparent but it would seem to have been involved in facilitating access into the enclosure and is possibly designed to filter traffic into its two different parts. There was no interval in the Enclosure F ditch and so access must have been via a bridge, although there was no surviving physical evidence for such. An access point in the middle of the eastern side of the enclosure would coincide with the perceived trackway between the eastern enclosures (Enclosures G and H, below), and may well reflect the original Enclosure A entrance position also, opposite the entrance of the central roundhouse (Structure 17).

#### Structure 16 (Figs. 14 and 15)

The only discernible structure occupying the southern half of the enclosure during this phase was a represented by a rectangular array of twelve post positions in the eastern part of the area, numbered collectively as Structure 16. The posts were spaced about 2.5 m apart in a four by three post matrix that measured 7 m by 7 m in plan, although the anticipated post-hole in the northern half of the west side was absent. The larger and better surviving posts were situated mainly on the eastern side of the array, some of which had possibly seen replacement. The post-holes ranged in diameter from 0.3 to 0.75 m and in depth between just 0.05 m and 0.25 m, the fills all being of dark brown silty clay (Fig. 15). There are a number of pits and post-holes in the general vicinity of this structure, particularly to the south-east. A number of these (including 1637 and 1639) seem to be aligned with the eastern side of Structure 16 and might be associated with it, or alternatively could represent a separate smaller structure measuring about 3 m square.

Un-phased features apart (such as roundhouse gully 1645; Fig. 14), the only other feature in the southern part of the enclosure which might have been attributed to this phase is the infant burial (1621). This was situated in the near centre of the enclosure, 11 m west of Structure 16 (Fig. 14).

#### The Sub-Enclosure (Figs. 14 and 16)

Ditch 23 defined a rectangular sub-enclosure, measuring approximately 26 m by 11 m, which occupied the north-eastern corner of Enclosure F. The ditch forming



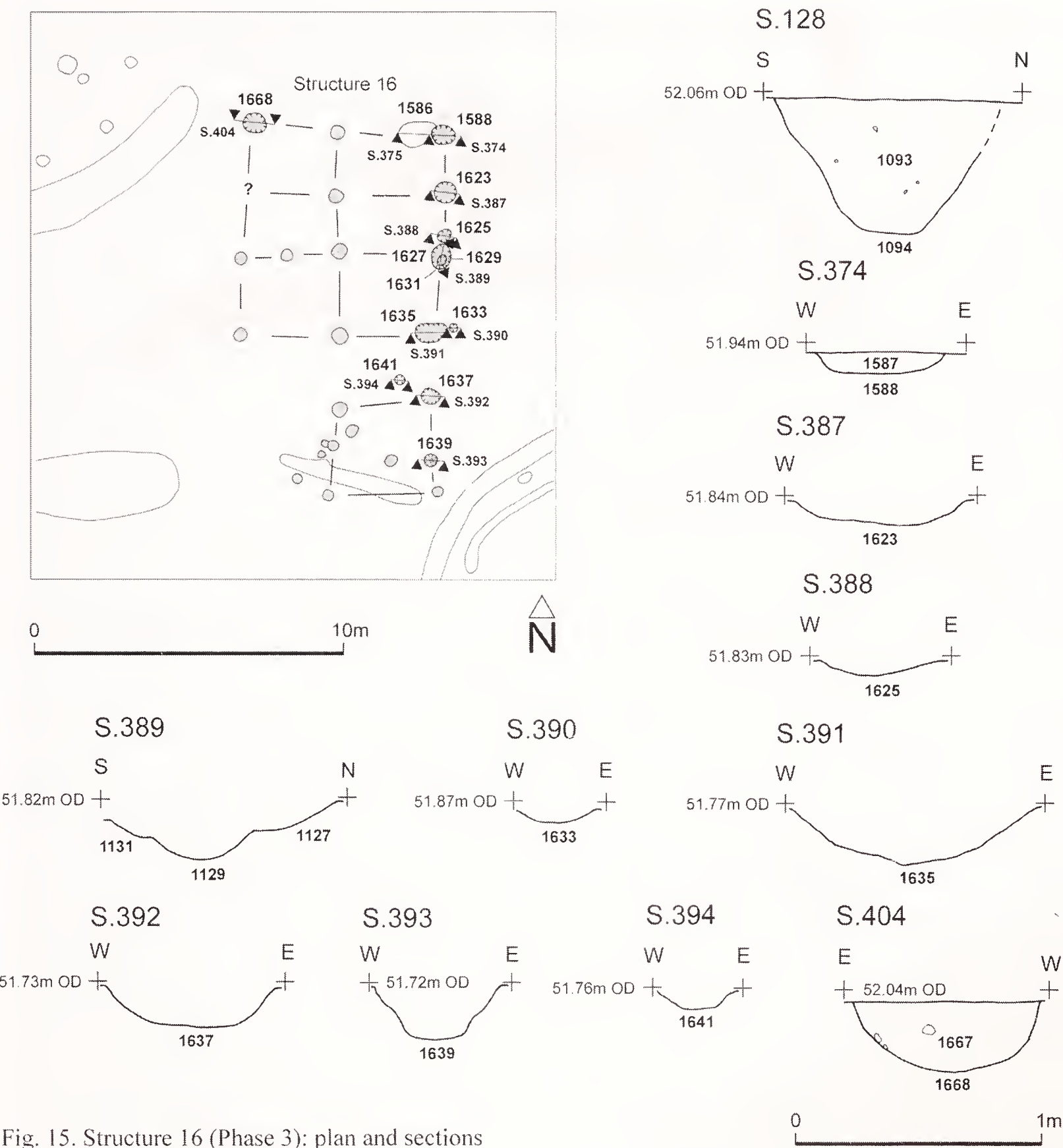


Fig. 15. Structure 16 (Phase 3): plan and sections

the shorter western side (1142) was 6 m long and articulated with the north side of the main enclosure ditch (Ditch 7) at right angles. Its curtailment resulted in a 5 m-wide entrance at the south-west corner. At 1.05 m wide and 0.4 m deep, the western ditch (1142) was better preserved than that forming the southern side (1375), which was 0.5 m wide and no more than 0.2 m deep. The southern ditch was observed over a distance of 22 m and was slightly curved in plan. It had been truncated at either end and its eastern end, which may also have originally joined the main enclosure ditch, betrayed evidence of an earlier ditch (1373) on a slightly different alignment (Fig. 16, S.281). Ditch 23 produced 24 sherds of pottery, eleven of which were Roman. The earliest and most diagnostic Roman material comprised two samian sherds and

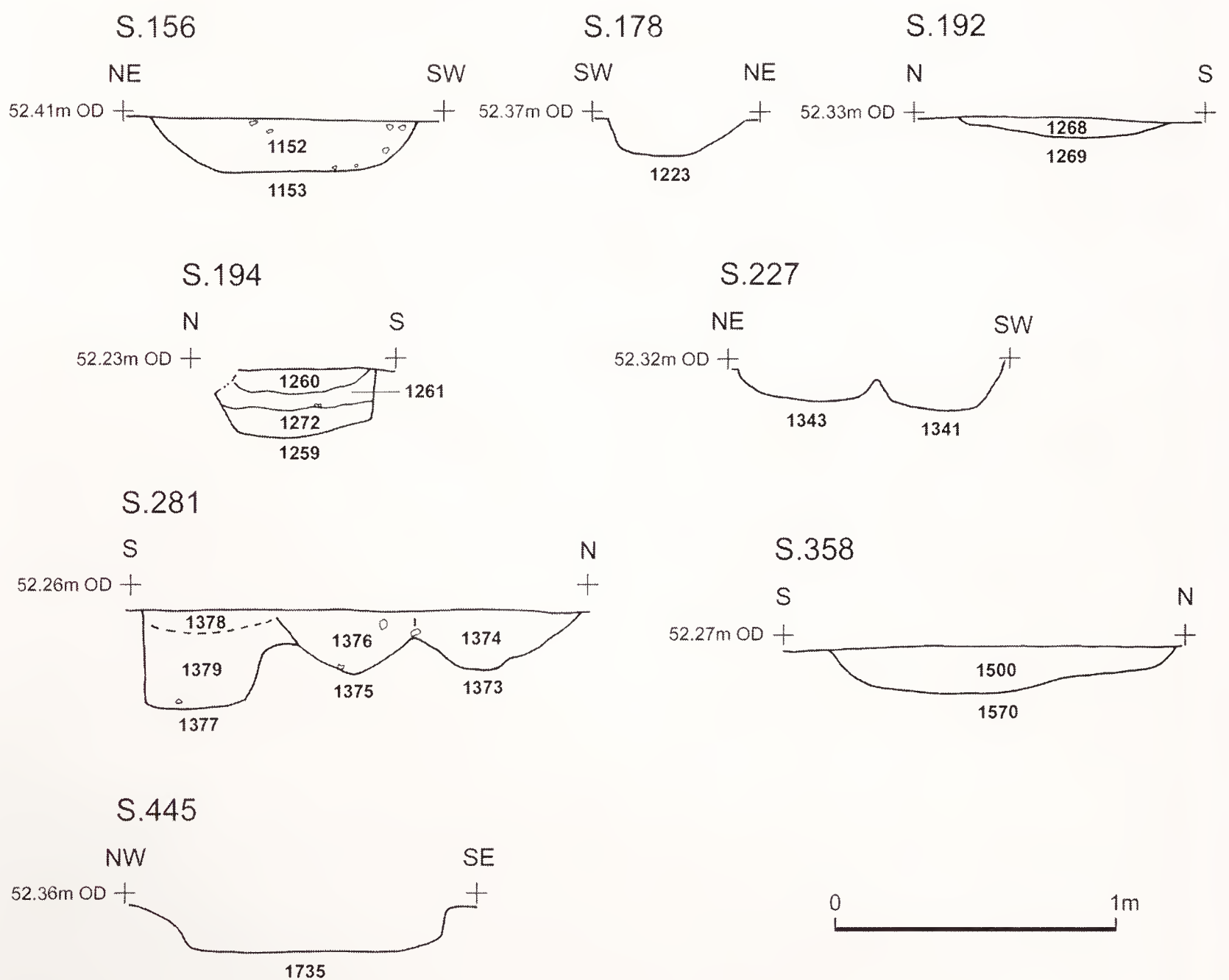
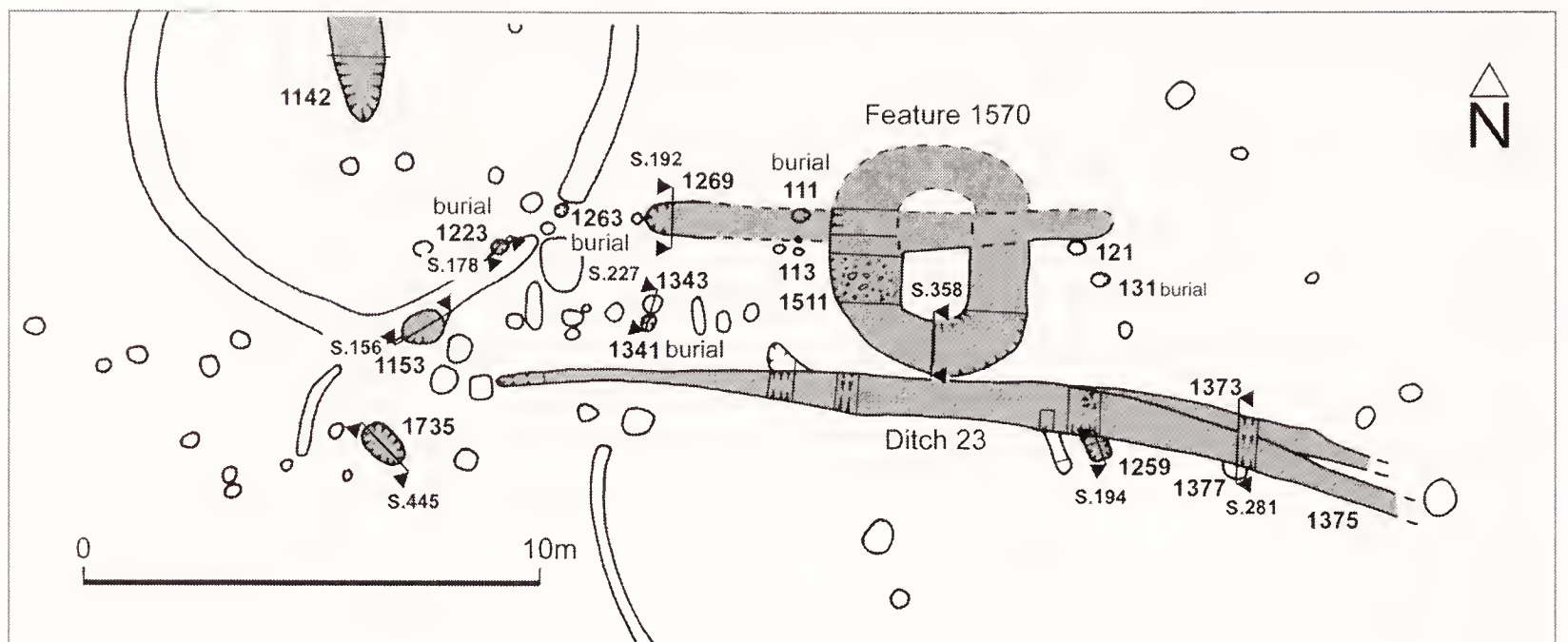


Fig. 16 Enclosure F sub-enclosure, feature 1570 and adjacent features (Phase 3): plan and sections



a mortarium of 2nd century date (p. 87). Further corroborative dating (AD 98-117) is provided by a Trajanic coin (p. 110).

A somewhat enigmatic feature (1570) was situated centrally within the southern part of the sub-enclosure. It had a U-form plan, with maximum dimensions of 4.35 m in length and 3.55 m in width, the northern side not being detected. The broad gully that defined it was 1.2 m wide but only 0.15 m deep (Fig. 16, S.358), leaving an internal area measuring only perhaps 3 m by 1.5 m. The gully was filled with a dark grey silty clay containing large pieces of chalk rubble. In places this rubble was reminiscent of the remnants of a chalk foundation that had been robbed out and offers the possibility of a very small structure here. The stratigraphic relationship between feature 1570 and a shallow east-west gully (1269) could not be ascertained. Gully 1269, seen intermittently over a distance of 10 m, was less than a metre in width and only 0.1 m in depth (Fig. 16, S.192). Forty-four sherds of pottery were recovered from the dark grey silty clay fill of 1570, 20 of which were Roman greywares in association with H2 handmade fabrics (p. 86-88). This feature also produced three small iron objects (two nails and part of a stake; see pp. 109-10). A door pivot stone (p. 108, No. 3 and Fig. 27c) recovered as an unstratified find from Trial Trench B offers further circumstantial evidence of a small structure at this location.

Apart from Feature 1570, some 30 discrete features were recorded within the area of the sub-enclosure (Fig. 14), though only three (113, 121 and perhaps 1343) might be equated with this phase with any confidence on the basis of the 2nd/3rd-century pottery from their fills. Post-hole 121 in particular contained sherds from a loop-handled greyware-jar in a 2nd or early 3rd-century fabric (p. 91). Indeed, some two-thirds of these features produced no finds at all. In the majority of cases where features did yield pottery, this was often a single sherd of native handmade material. There are no particular alignments or arrays discernible in the group and, moreover, the distribution seems to extend beyond the area of the sub-enclosure, which might indicate that they have little to do with its function and possibly relate to earlier phases of activity. Several features appear to have cut or been cut by the southern enclosure ditch (e.g. 1259 and 1377).

Interestingly, this sub-enclosure also contained five of the six infant inhumations found during the excavations (e.g. 1341; Fig. 16, S.227; Plate 2). The dating of these burials is imprecise, though the evidence available and parallels from other sites suggests that they are probably a later Romano-British phenomenon, rather than an earlier Iron Age one. Burial 1223 actually cuts the fill of the Structure 1 gully (Phase 2), whilst Burial 111 appears to cut the fill of feature 1269 (Phase 3). A small amount of pottery from Burials 111 and 131 includes wheel-thrown Roman wares of 2nd century date, as well as hand made material (p. 91), whilst a radiocarbon date based upon bone from Burial 131 offers a broad date range of AD 1-340 (p. 122-23, Table 11). On balance, then, three of the infant burials have some stratigraphic or dating evidence that might support their inclusion in this phase, though the fact that one of them cuts the fill of 1269 (supposing 1269 is a Phase 3 feature) might suggest that burial was a secondary use of the sub-enclosure. Attributing all five burials to this phase requires a belief that the practice was habitual and common to one phase,

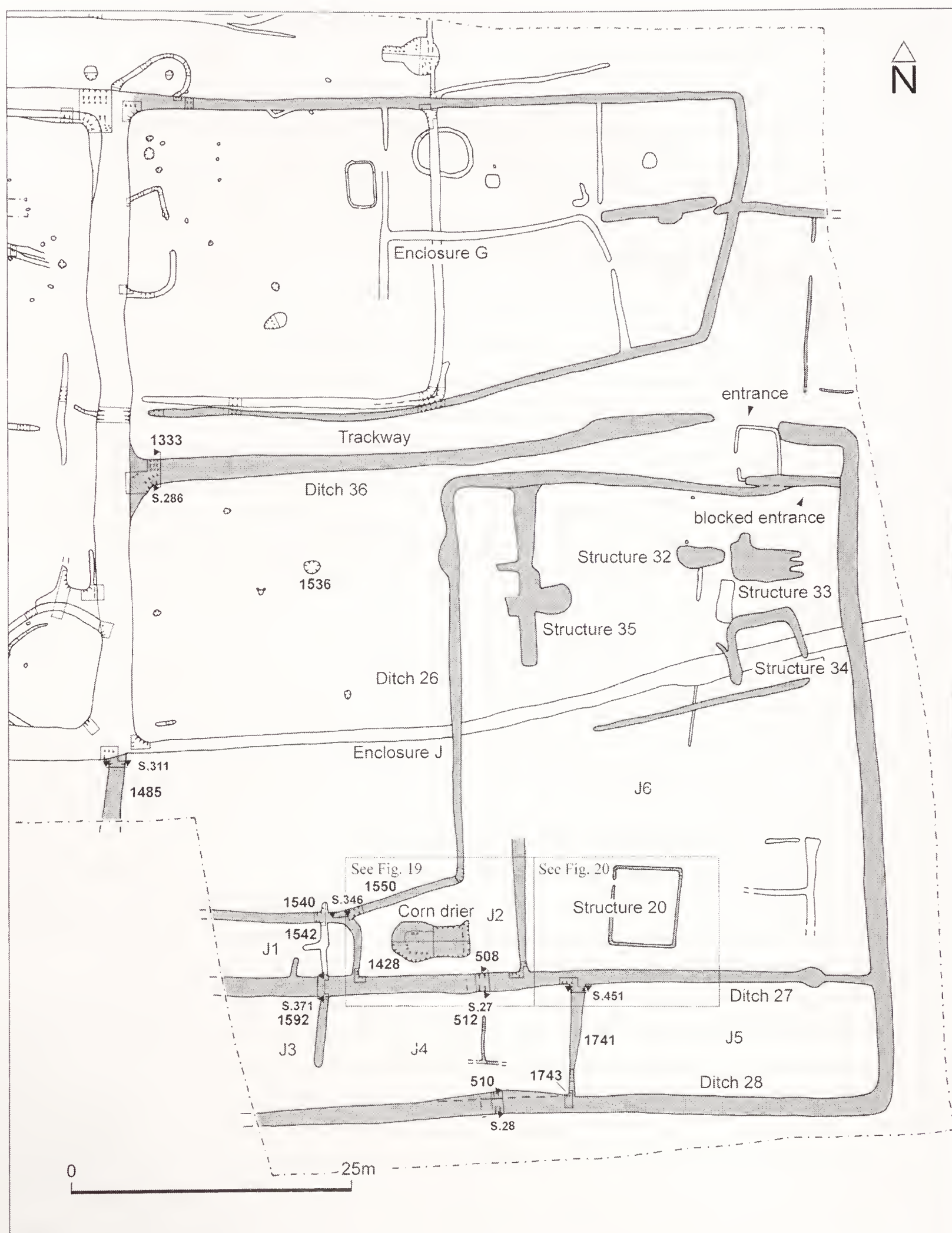


Fig. 17 Plan of structures and features attributed to Phase 4



though in fact this cannot actually be demonstrated. Equally, there is no better reason for including Burial 1621, in the southern half of Enclosure F (Fig. 14), within this phase, other than on the grounds that its association (albeit detached) with the other five.

#### Enclosure G (Figs. 13 and 14)

Whether or not Enclosures B, C and D continued in use into Phase 3 is not clear. It is apparent, however, that Enclosure E was supplanted by a much longer irregular enclosure (Enclosure G), again attached to the northern half of the eastern side of the principal enclosure. The enclosure was defined by a ditch (Ditch 9) that was, on average, about 0.9 m wide and between 0.3 and 0.55 m deep (Fig. 15, S.128). Its fill was relatively rich in finds, producing over 170 sherds of pottery, 63% of which was native handmade material (H2 and H4 fabrics), the remainder being Roman greyware (pp. 86-88 and 90-91). The only other finds were three fragments of cattle bone. That this new enclosure probably respected the relict earthworks of the former Enclosure E is indicated by the fact that its western half (sub-enclosure G1) reflects the earlier Enclosure E dimensions, whereas the eastern half tapered to a narrower more irregular form, once beyond the eastern extent original regime. Overall, Enclosure G measures 55 m in length, with a maximum width of 28 m, tapering to 22 m at its eastern end. The eastern 32 m of the enclosure interior was clearly sub-divided into three smaller compounds (sub-enclosures G2-G4), all of broadly equal size, each interlinked by access points represented by intervals in the dividing ditches.

The five discrete features found within sub-enclosures G2-G4 could only be recorded in plan and were not subject to excavation. Sub-enclosures G2 and G3 both contained largish pit-like features close to their centres, but there can be no certainty that they were contemporary with the enclosure of these areas. The only discrete feature that might be equated with Enclosure G, by virtue of it containing pottery of possible early 3rd-century date, is a large oval pit (1404) in the southern part of Enclosure G1. This pit measured 2.35 m by 1.15 m in plan, was 0.35 m deep, and contained a dark brown silty clay fill. As discussed above the other features in the north-western corner of the enclosure are potentially earlier, and certainly none of them could be ascribed to this phase with any confidence.

An expansion of the Enclosure G complex, beyond the area defined by Ditch 9, is indicated by the east-west ditch that bisects sub-enclosure G3 and cuts Ditch 9 to run eastwards. This ditch, along with what appears to be part of an appended enclosure might be regarded as a later sub-phase of Phase 3, or even part of the Phase 4 development of the site, articulating with the earthworks of the former Phase 3 enclosures.

#### Enclosure H (Figs. 14 and 18)

The dog-leg in the south side of Enclosure G is reflected in the alignment of Ditch 37, that ran eastwards from the south-east corner of Enclosure F. That this nuance is also reflected in Ditch 36, the north side of the later Enclosure J (Phase 4), suggests that this ditch too may have mirrored the course of a still extant Enclosure G ditch, in forming the south side of a trackway approaching the entrance to Enclosure F.

The markedly different profile of Ditch 36 (Fig. 18, S.286) to the rest of the Phase 4 enclosure, supports the notion that it was an earlier phenomenon. Ditch 37 continued eastwards beyond the excavation area, and may have been contemporary with the un-investigated segmented boundary that cut through the middle of sub-enclosure G3 to extend eastwards (see above). Unfortunately, neither can be detected in the geophysical survey data in order to gain an idea of their full eastern extent. Ditch 37 itself only received a token investigation to establish that it was less than 0.3 m deep. A number of discrete features fall within the area it enclosed, but there is no diagnostic evidence that allows them to be associated with this enclosure.

#### Phase 4

##### Enclosure J (Figs. 17 and 18)

The final phase of the site's development saw the creation of a large rectangular ditched enclosure immediately to the south-east of Enclosures F and G (Phase 3). Given that the new enclosure utilised part of the eastern side of Enclosure F, and probably adopted the course of a pre-existing trackway as its northern side (Ditch 36; see above), it is unlikely that the Phase 3 enclosures went totally out of use with the creation of the new enclosure. It is more likely that Enclosure J represents an expansion to create a much bigger complex. In terms of dating, the pottery from the deposits attributed to Phase 4 activity is little different to that from the Phase 3 deposits (although percentage wise there is more Roman material), and it is only by virtue of the stratigraphic relationship between the ditches of Enclosures H and J that phase differentiation is possible.

In its initial manifestation Enclosure J measured 67m by 58m in plan and, except for the pre-existing ditches that formed the north-west corner, was defined by one continuous ditch (Ditch 28). The south-west corner of the enclosure lay beyond the excavated area and was not revealed. A 6 m-wide entrance seems to have been situated at the eastern end of the north side of the enclosure. Ditch 28 was up to 1.7 m wide and 0.5 m deep (Fig. 18, S.28 and S.311). Its reddish-brown silty clay fill was investigated at three locations and produced nine sherds of pottery, a mixture of handmade and Roman wares, and insignificant quantities of flint and animal bones.

Because this part of the site was not excavated in detail, interpretation remains largely intuitive. Thus it is supposed that at some later point in time the Phase 4 enclosure contracted, retaining its original eastern and southern ditches, to form an irregular subdivided enclosure with a reverse L-shaped plan created by Ditches 26 and 36. Ditch 26, which was investigated at just two locations, was 0.6 m wide and 0.4 m deep (Fig. 18, S.346) and produced a small number of Roman pottery sherds. The constricted gap between Ditches 26 and 36 on the northern side of the enclosure is less than 1 m and suggests that the northern side of the initial Enclosure J, represented by Ditch 36, probably went out of use with the creation of the L-shaped enclosure, perhaps creating a funnel-shaped access between Enclosures G and J.

Virtually all the subdivisions and major features seem to be confined within the L-shaped enclosure. The one exception is the north-south gully (1542), which seems to pre-date Ditch 26, but possibly respects Ditch 27 (Fig. 18, S.27 and S.371), potentially



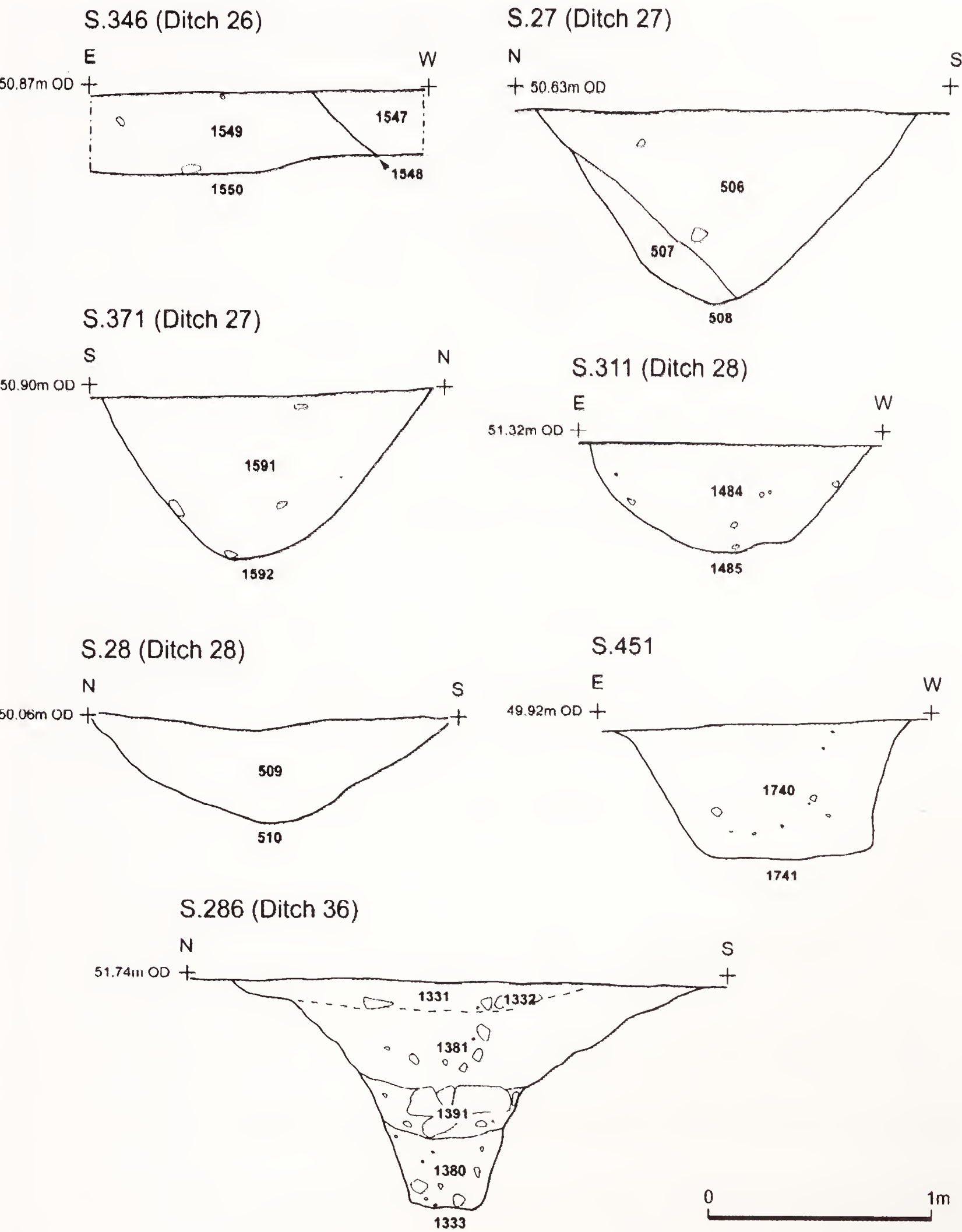


Fig. 18 Enclosure J (Phase 4) ditch sections

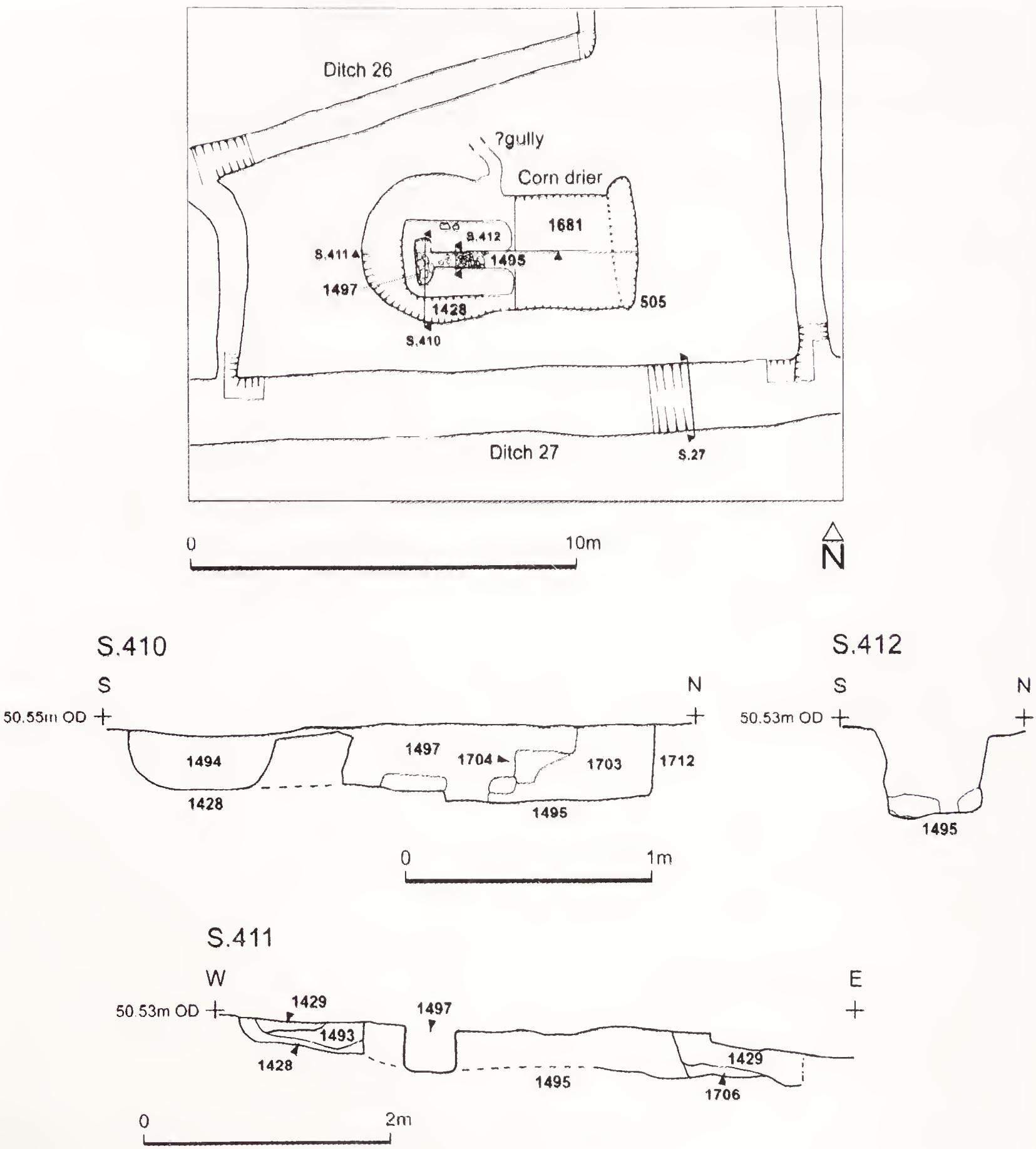


Fig. 19 Corn drier in sub-enclosure J2 (Phase 4): plan and sections



an early east-west partition of the original Enclosure J. Their arrangement may have had some bearing on the eventual plan of the modified L-shaped enclosure.

The southern part of the L-shaped enclosure appears to have been partitioned into a series of small sub-enclosures, or working areas, of various dimensions (J1-J5, see Figs. 17 and 18). The stripping of three of these sub-enclosures (J1, J3 and J5) did not reveal any features, whilst sub-enclosures J2 and J4 are notable for the presence of a corn drier and a T-shaped gully arrangement. About two-thirds of the total area of the L-shaped enclosure was occupied by a large rectangular area (J6) which might have been the main focus of the enclosure complex, containing as it did a number of, largely un-investigated, features and structures (Structures 32-35).

#### Sub-enclosure J2 and Corn drier (Figs. 17 and 19; Plates 3-5)

This trapezoidal enclosure, measuring 15 m by 9 m, seems to have communicated directly with the main enclosure (J6) via a 4 m wide entrance at its north-eastern corner. The interior of the sub-enclosure was occupied by a single corn drier, situated within a large east-west orientated feature measuring in total 7.2 m by 4.1 m in plan. As a soil mark, the eastern half of the corn-drier pit was basically rectangular, but with an apsidal western half which, being slightly wider, gave it a bulbous appearance in plan. Approximately 75% of the area of the corn drier was investigated, the north-western quadrant remaining largely unexcavated.

Excavation revealed the bulbous plan to be courtesy of a gully (1428) that had been deliberately excavated to leave the corn drier situated upon a rectangular clay plinth measuring 2.5 m by 2 m. Within this rectangular area was the T-plan flue (1495), which measured 2 m long, 0.4 m in width and was up to 0.35 m deep. The transverse cross 'T' (1497) was found to be 1 m in length. The base of the flue contained a 0.2 m deep layered deposit of charcoal and ash with carbonised cereal grains that represented many discrete episodes of firing. Onto this deposit had been pitched several large to medium irregular pieces of chalk and sandstone. The reddening on some of these stones would suggest that they had originally formed the lining to the flue, possibly explaining the lack of symmetry in the excavated flue sides.

In contrast, the surrounding gully (1428), which varied between 1.4 m and 0.4 m in width and was up to 0.4 m in depth, provided no evidence of heat affection or carbonised remains, except within the wider rectangular area at the eastern end that would have served as a stoking area for the firebox at the end of the T-plan flue. Thus, excavation in this part of the pit revealed a deposit of charcoal and some heat reddening (1681) related to this activity.

It would seem likely that the gully was designed to facilitate rapid drainage around the corn drier. The levels suggest a slight gradient which would have resulted in water collecting at the eastern end of the pit. This undesirable consequence may have been mitigated by the insertion of a north-south trench (505), which could have acted as a sondage to divert water away from the working area of the corn drier. Alternatively, a potential gully (unexcavated) on the northern side of the pit may have drained water away towards the enclosure ditch (Ditch 26).

Quite why gully 1428 was created in the way it was, its symmetry not reflecting that

of the central plinth and corn drier, is unclear. Apart from two stones on the northern edge of the plinth, no remains of the above-ground structure survive. One possible explanation of the bulbous gully plan may lie in the nature of the structure that covered the corn drier, in that it is consistent with what would be required to collect water running off a projecting circular roof, of native style, although the gully and pit generally produced a mixture of handmade (H4) and Roman pottery sherds, including a fragment of a 2nd century mortarium (pp. 87, 92).

#### Sub-enclosure J4 (Fig. 17)

The only feature found within this rectangular 20 m by 10 m sub-enclosure was discovered during the evaluation stage (Trench E). Feature 512, effectively two gullies in a T-shaped arrangement, measured 4.3 m north-south and at least 2 m east-west across the width of the trial trench. This feature was not identified in the poorer conditions during the open area stripping and so its full extent was not established. From the evaluation it may be ascertained that the gullies were 0.5 m wide and no more than 0.1 m deep. It would seem to represent a further subdivision of the interior of this part of the enclosure.

#### Sub-enclosure J6 (Figs. 17 and 20)

The largest component of the L-shaped enclosure, a large rectangular area measuring 35 m by 43 m, occupied virtually the whole of the eastern half of the primary enclosure. The access to this area may well have been afforded via an entrance at the north-east corner, in the same relative position as the entrance for the initial Enclosure J. Its potential existence was highlighted by a straight section of ditch that is regarded as a later blocking of an interval in the ditch. Direct access to sub-enclosure J2 was seemingly facilitated in the south-west corner, although no other potential access points were apparent.

A number of features were identified in plan within the interior of the sub-enclosure, though, in the absence of any significant excavation in this part of the site, not all can be regarded as features contemporary with Enclosure J. The one possible exception is Structure 34 which, from the different fill colours, was observed to have clearly cut the Phase 3 ditch (Ditch 37) of Enclosure H. Structure 34 consisted of a U-plan gully, measuring approximately 5 m by 5 m, with an open south side, and was possibly associated with a 20 m long gully that was aligned with the south side. As with the other unexcavated features within this area, the plan alone does not indicate any particular function, although it has been suggested that Structures 32 and 33 are consistent with crop driers seen on other sites in East Yorkshire, on the basis of how they appeared immediately after stripping (R. Mackey *pers. comm.*). The apparent association of a linear group of soil marks (collectively Structure 35) with Ditch 26 might imply that these too are contemporaneous with sub-enclosure J6.

The only feature investigated within J6 was part of Structure 20, in the southern part of the enclosure. This comprised a gully (0.25 m wide and 0.15 m deep) forming a well defined rectangular enclosure, 6.5 m by 4.8 m in plan, with a narrow 0.6 m wide access point in the northern part of its western side (Fig. 17, S.353, S.354,



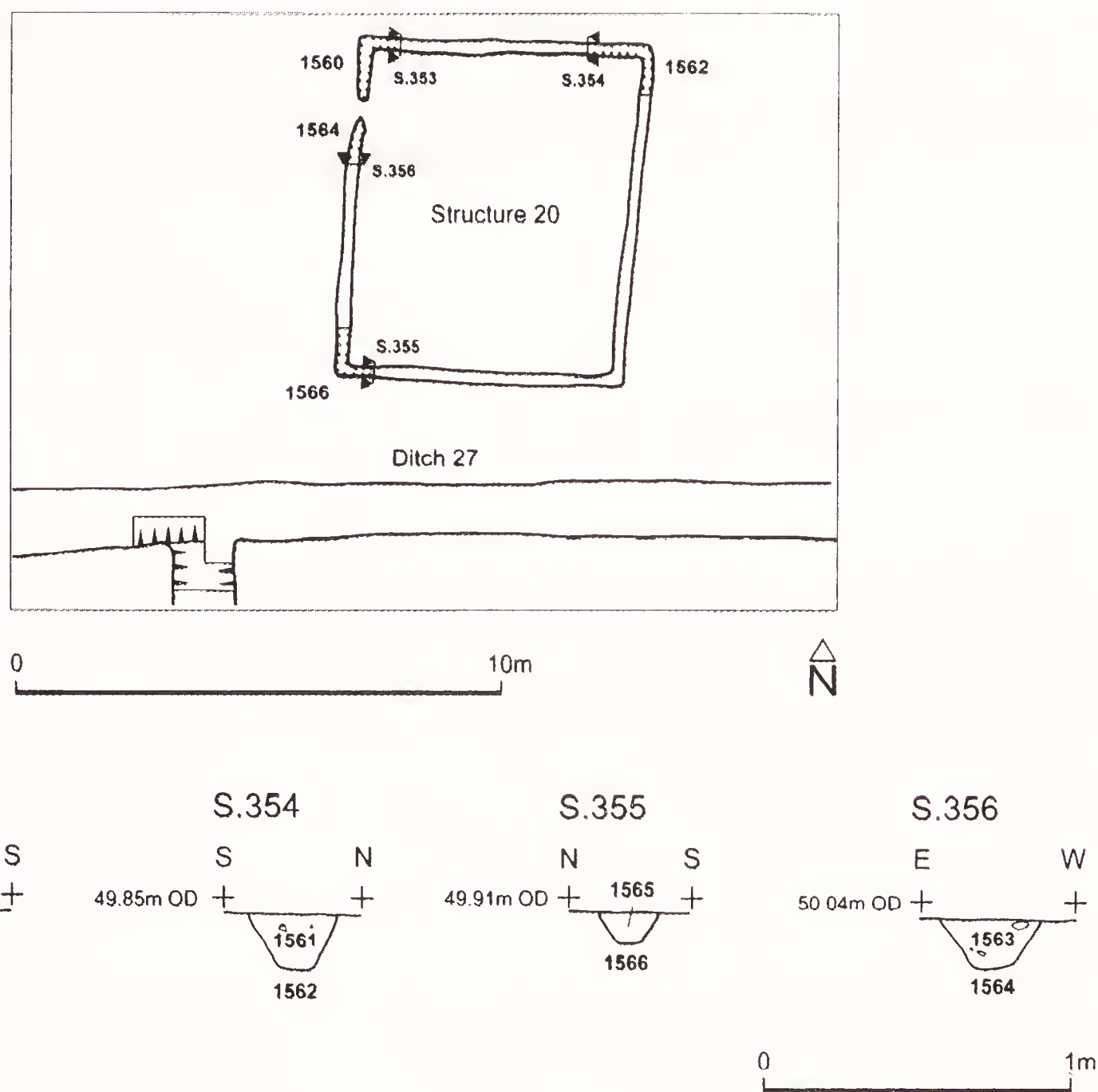


Fig. 20 Structure 20 in sub-enclosure J6 (Phase 4): plan and sections

S.355 and S.356). The fill of the gully produced only a small number of pottery sherds. No internal features were in evidence and it therefore seems unlikely that this rectangular feature represents a building proper, and is more likely a palisade slot for an animal fold.

Elsewhere, in the north-western area of Enclosure J feature 1536, a large pit with a diameter of 1.3 m and a depth of less than 0.2 m, produced 38 sherds of pottery, 35 of which were Roman. In all five vessels were represented, the principal one being a 2nd-century carinated bowl (p. 101), offering the possibility that it might actually relate to an earlier phase.

#### Selected Un-phased Features

A large number of the recorded features remain un-phased, either because they were not excavated, did not have a key stratigraphic relationship, or did not yield artefacts with sufficient dating resolution. Some of these features have nevertheless produced significant quantities of finds, or are of notable form, and thus warrant more documentation within the report than is provided simply by their plans.

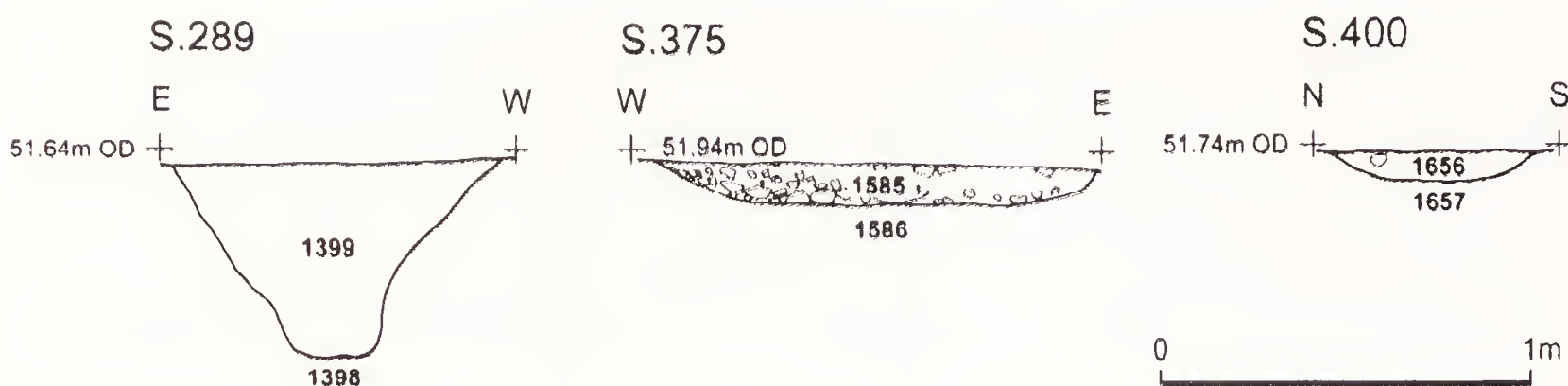


Fig. 21 Un-phased feature sections

### Enclosure A/F

The majority of the selected un-phased features were found in or around Enclosure A/F. Two of these features (1645 and 1225, Fig. 4) were curvilinear in nature and might have represented other roundhouse structures. The most convincing of these was feature 1645, which was immediately to the south-west of Structure 29. This fragment of a ring gully represented a structure with a diameter of about 14 m, much of which lay beyond the excavation area and was not formally investigated. The ring gully was very shallow (less than 0.02 m) and was only visible in very dry conditions immediately after stripping and was not located again after the heavy rainfall rendered it invisible. Nevertheless, a notable quantity of pottery was recovered from its truncated gully fill.

Feature 1225 lay in the north-western corner of the enclosure and was much smaller, being about 4.5 m long, 0.6 m wide and up to 0.2 m deep. The removal of its fill from its western end revealed a line of nine stake-holes, at intervals of between 0.1 and 0.3 m, all about 0.1 m in diameter. None of these was more than 0.06 m in depth and none produced any finds. The general gully fill, however, produced several abraded pottery sherds of probable Roman date.

Pit 1586 was cut by post-pit 1588 at the north-east corner of Structure 16 in the southern half of the enclosure (Figs. 15 and 21, S.375). Its fill (1585) produced a notable amount of pottery (66 sherds of H1 fabric handmade material and 23 of Roman greyware; p. 93), a small amount of animal bone and three iron nails. The quantities suggest that this feature's final function was more likely as a rubbish pit than an earlier post-setting associated with Structure 16, as was initially thought. The pit might be attributed to Phase 1 or 2.

In the south-eastern quarter of Enclosure A/F was a small east-west linear feature (1657) that measured 4.7 m by 0.5 m in plan and was up to 0.1 m in depth (Figs 10 and 21, S. 400). The fill of this feature produced several sherds of Iron Age pottery, but also four fragments of clay pipe which are seen as intrusive.

### Ditch 1398 (Figs. 13 and 14)

This north-south ditch, found at the south-western edge of the site, appears to respect the ditch of Enclosure A/F, to which it is at right angles, although it does not articulate with it. The ditch was exposed for a distance of just 5 m (Fig. 14) and was 0.9 m



wide and 0.5 m deep (Fig. 21, S.289). Its distinctive V-shaped profile is very different from the majority of the other ditches on the site, which tended to have broader U-shaped profiles. The closest parallel morphologically is Ditch 36 (Phase 3). The small pottery assemblage was a mixture of Iron Age fabrics and Roman greyware.

### Trackway Area

A 1.2 m diameter pit (1021), 0.2 m deep, immediately to the west of Structure 8 (Fig. 7), is notable for producing 102 sherds of mainly H2 fabric Iron Age pottery (pp. 86-88, 93), as well as four sherds of Roman material. It was almost certainly associated with Phase 1 or 2, but the fact that it lies in the area of the trackway, rather than in one of the Phase 2 enclosure areas could suggest a Phase 1 origin.

### ARTEFACTS OVERVIEW

Apart from a large assemblage of native hand-made and Romano-British wheel-thrown pottery the excavations have yielded few artefacts of note. A single coin offers a firm *terminus post-quem* and additional dating resolution to that provided by the other diagnostic finds and radiocarbon dates, whilst a small assemblage of querns and a handful of potential stone and metal artefacts and metalworking residues offer some insight into the lifestyle of the settlement beyond what might be gleaned from the environmental evidence. A notable assemblage of early prehistoric flints recovered as residual finds from the settlement feature fills offers some perspective on earlier exploitation of the landscape in this area. Almost 6000 well-preserved animal bone fragments were recovered although, overall, too few were recovered to facilitate meaningful statistical analysis between the phases. Similarly, only Phase 4 produced a significant quantity of carbonised seeds and plant material that has allowed any meaningful conclusions to be drawn. Six infant burials within the settlement area provide further evidence of a Romano-British practice observed on several other sites in the region. Full details of the methodologies and results of the analyses carried out are contained in the site archive. In the following finds catalogues the illustrated items are denoted by an asterisk.

### IRON AGE AND ROMAN POTTERY

By Peter Didsbury

#### Introduction and methodology

A large assemblage of Iron Age and Roman pottery was recovered from the site, comprising 3171 sherds, weighing 31.213 kg and having an average sherd weight (hereafter ASW) of 9.8 g. There was, in addition, a small amount of daub and fired clay (269 fragments, ASW 3.1 g). All material was quantified by the two measures of number and weight, according to fabric or material category within archaeological context.

#### Iron Age and Roman fabrics

The Iron Age to early Roman handmade pottery accounts for between 82.3% and 83.9% of the total site assemblage (by weight and number of sherds, respectively). It

is of two main fabric types, being tempered either with calcareous material or with non-soluble stone temper. This bimodal fabric composition is a familiar one on East Yorkshire sites through much of the Iron Age. The two fabric categories, which correspond to Rigby's (1986) 'calcareously-tempered' and 'erratic-tempered' wares (CTW and ETW), have respectively been designated H1 and H2 for the purposes of this report. A third 'fabric' category (H4) denotes vesicular wares, which are no doubt leached examples of H1. As might be expected in this period there is a fairly large amount of variation within each overall category. The descriptions below are of 'typical' sherds. Detailed descriptions of the fabrics of individual vessels are provided in the illustration catalogue.

H1. The fabric contains ill-sorted crushed calcite or calcite and chalk, usually in moderate or abundant amounts. Inclusions may be up to 5 mm in size, though the majority of vessels are probably somewhat finer, with temper less than c. 3 mm.

H2. The fabric contains moderate to abundant angular non-soluble stone temper. This is predominantly quartz, sometimes derived from sandstones, but crushed igneous rock fragments also occur. As with the H1 fabrics, temper may be up to c. 5 mm but there is a considerable proportion in which much finer temper is employed, with sparse inclusions up to c. 2 mm occurring in what is essentially a sandy to gritty matrix. For catalogue purposes, fabrics with temper predominantly below 2 mm have been described as 'fine', the remainder as 'coarse'.

Fabric category	% no.	% weight
	(n = 2660)	(n = 25702g)
Calcareous (H1)	22.1	37.7
Vesicular (H4)	24.2	15.7
Non-soluble (H2)	49.9	46.2
Uncertain	3.8	0.4
Totals	100.0	100.0

Table 1. Relative distribution of the Iron Age pottery fabric types

The overall proportions of these categories within the site assemblage are presented in Table 1. It will be observed that the H2 and H1/H4 groups occur in almost equal proportions, though it is difficult to attach significance to this fact. The factors which determine the relative frequency of the two fabric traditions, both within and between sites, are not understood (Rigby 1986, 146). Rigby (1988) notes that, in British Museum excavations on various sites on the Yorkshire Wolds, the ratio between erratic and calcareously-tempered wares fluctuated extremely on a feature by feature basis. Work by the present writer on large Middle and Late Iron Age assemblages from Creyke Beck, Cottingham, revealed a similar situation (Didsbury *forthcoming*). In general terms, it is clear that the tempering material used might be conditioned by such factors as its suitability for different vessel types, the proximity



of different resource bases, cultural tradition, and socio-economic contact with other groups. It seems unlikely that the relative proportions of the two types will ever provide a useful chronological distinction.

Material of undoubted Roman manufacture and date accounts for the remainder of the assemblage (17.7% by weight, 16.1% by number). These figures partly reflect the relatively limited amount of excavation which took place in the southern and eastern sectors of the site. Distribution of types within the Roman assemblage is shown in Table 2.

<b>Fabric category</b>	<b>% no.</b>	<b>% weight</b>
	(n = 509)	(n = 5491 g)
Greyware (RG)	96.7	96.0
Mortaria (RM)	0.6	2.3
Oxidised (RO)	2.0	1.4
Samian (RS)	0.8	0.2
Totals	100.1	99.9

Table 2. Relative distribution of the Roman pottery fabric types

The sources supplying Roman greywares (and a small amount of oxidised ware) to the site are difficult to determine, but it may be noted that typical East Yorkshire greywares of the types produced by Norton and the Holme upon Spalding Moor (hereafter HOSM) industries in the 3rd and 4th centuries are conspicuously absent. There would appear to be little in the assemblage which need be later than earlier 3rd century. In more southerly parts of East Yorkshire, the majority of greywares in use before the rise of the HOSM industries in the *c.* mid-3rd century were probably supplied from North Lincolnshire sources, and a similar situation possibly obtains here also. Certainly, such vessels as the Antonine-style carinated jars and other contemporary forms which occur here (e.g. Nos 33 and 47) would be consistent with such an origin.

There were only three mortarium sherds in the assemblage, all probably basal, from either two or three vessels. All are in the same fine-textured orange-brown fabric, with mixed trituration grit including quartz, sandstones, flint and unidentified hard black rock. Kay Hartley, who kindly reported on the material, suggests that the workshop responsible was situated in an area including York, Malton and North Lincolnshire, and that the vessels are most likely to be of 2nd-century date. One sherd was recovered from pit 1259 in Enclosure A (Phase 2), whilst another came from the Enclosure J ditch (Phase 4). The remainder was un-phased.

A similarly small samian assemblage (four sherds from four vessels) also occurs. From Central Gaulish centres came Hadrianic or Antonine, and Antonine, dishes or bowls (Enclosure F sub-enclosure, Phase 3), and a Hadrianic or Antonine possible form 46 (Enclosure J ditch, Phase 4). From East Gaul, probably La Madeleine, came a Late Hadrianic or Early Antonine dish (gully 118). Identifications were kindly undertaken by Brenda Dickinson.

Fabric category	% no. (n = 528)	% weight (n = 4490g)
Daub	0.6	0.4
Handmade, temper uncertain (H)	6.6	0.6
Calcareous temper (H1)	16.7	24.7
Stone temper (H2)	46.0	51.2
Vesicular (H4)	18.6	12.1
Roman greyware (RG)	10.0	9.7
Roman oxidised? (RO?)	0.4	0.1
Rusticated ware (RGRUS)	1.1	1.1
Totals	100.0	99.9

Table 3. Phase 1 fabric distribution

Discussion by Phase

Phase 1: the unenclosed settlement (Nos 1-10; Fig. 22)

Under discussion here is pottery from Structures 1, 8, 10, 11, 14 and 19, and from Pits 1069, 1078, 1082, 1602 and 1613. The phase assemblage amounted to 528 sherds, weighing 4490 grams (ASW 8.5 grams). As Table 3 reveals, it is dominated by hand-made vessels in regional later Iron Age tempering traditions, only *c.* 10% of the material being wheel-thrown Roman grey and oxidised wares.

The majority of the material from this phase (64.0% by number, 83.6% by weight) came from the pits, the remainder deriving from the gullies of the aforementioned structures. ASWs for both sets of material are low (structures 5.8 g, pits 10.0 g), suggesting a high degree of brokenness, dispersal and redeposition. The very low value for the material from the gullies might be consistent with regular cleaning out of these features.

Nothing in the handmade component from this phase allows very close dating within the later Iron Age. Two vessels from the gullies (Nos 22 and 40) find published parallels from sites which Challis and Harding (1975) ascribe to their 'La Tène III', while a vessel from Pit 1069 (No. 9) might normally belong as late as the 2nd century AD. It may be noted that most of the hand-made material is characteristically similar to that from Phase 2 (see below).

Roman wheel-thrown pottery occurs in the gully groups from Structures 1, 10 and 14, as well as from three of the pits (1069, 1078 and 1082). Much of this material consists of worn body sherds in sand-tempered greywares of late 1st to early 3rd-century appearance, and the few chronologically diagnostic pieces occur only in Pit 1069. These are: sherds from two different rusticated jars (not illustrated), fragments which probably represent a Flavian to Antonine carinated jar (not illustrated) and a greyware jar of possible late 2nd to mid 3rd-century date (No. 7). The rusticated ware, a type which is conventionally dated *c.* AD 70-130/150, is of some interest in



Fabric category	% no.	% weight
	(n = 1052)	(n = 13204g)
Daub/fired clay	2.4	1.1
Handmade, temper uncertain (H)	2.5	0.1
Calcareous (H1)	28.2	46.5
Stone temper (H2)	42.5	37.0
Vesicular (H4)	20.4	12.4
H2/RG	0.3	0.03
Roman greyware (RG)	3.2	2.4
Rusticated ware (RGRUS)	0.2	0.1
Roman oxidised (RO)	0.3	0.4
Totals	100.0	100.0

Table 4. Phase 2 pottery fabric distribution

that it probably implies some level of socio-economic contact, at however many removes, with an institution such as the Roman army.

The presence of Roman pottery in this phase may be accounted for in a number of ways. In the structural gullies it may simply have arrived during silting after disuse. In the case of the pits, it occurs in both the lower and upper fills of 1069 as well as in the single fills of 1078 and 1082. It is clear that all three features went out of use in the Roman period, though the pottery can, of course, provide no indication of when they were first dug.

Phase 2: Enclosures A-E (Nos 11-31; Figs. 22 and 23)

Pottery came from the ditches of Enclosures A (Ditch 6), B (Ditches 2 and 3), D (Ditches 4 and 5) and E (Ditches 12 and 13); the Structure 17 gully and associated features; Gullies 1072 and 1616; and Pits 1055, 1001 and 1009. The phase assemblage amounted to 1052 sherds, weighing 13,204g (ASW 12.6 g). Fabric distribution for this phase is shown in Table 4.

The composition of the phase assemblage is essentially similar to that of Phase 1, the main difference being in the somewhat lower proportion of Roman material present, at c. 3-4% (see further below).

The handmade material consists entirely of jars. These display a variety of profiles and rim forms which Challis and Harding (1975) regard as particularly common in their 'La Tène III' phase of the regional Iron Age. It will be noted that the parallels quoted throughout the catalogue include several from sites which are conventionally held to belong to the first centuries BC and AD, e.g. Costa Beck, Faxfleet 'A' and Saltshouse School, Hull. If the small amounts of Roman pottery referred to above are contemporary with at least some of this material, then these assemblages are best described as 'peri-Conquest', and may culminate with the earliest reception of wheel-thrown Roman greywares in the later 1st or early 2nd-century AD. This might just be consistent with the extreme lower end of the radiocarbon date-range obtained from a

cattle humerus from the Enclosure B ditch fill (AD 130-430; see Table 11).

Roman material, though present in only small amounts, is widely distributed, occurring in Ditches 3, 4, 6 and 13, as well as in Gully 1072. Once again, however, much of the material consists of worn greyware body sherds of little evidential value. The most chronologically diagnostic pieces come from Ditches 4 and 6 (Enclosures D and A), both of which produced rusticated ware. In addition, Ditch 6 produced a campanulate bowl with bifid rim (No. 11), a 2nd-century form perhaps in production from c. AD 120, and thus conceivably contemporary with the rusticated ware. Greyware sherds with acute-angled lattice decoration were present in Ditch 4.

Two sub-rectangular pits within the ring gully of Structure 17 (1584 and 1649) contained small pottery assemblages, in each case entirely of hand-made material (No. 23). Of two semi-circular structures immediately to the north-west of the Group 17 structure (cuts 1617 and 1699), only one (1617) produced any pottery, again a small assemblage of handmade material. Some thirteen post-holes were excavated within Structure 17, but only two of them (cuts 1662 and 1664) contained any pottery, in each case crumbs and fragments of handmade material. It may be noted here that there is a possible inter-contextual join linking the Structure 17 gully with an entirely hand-made assemblage in pit 1055, some metres to the south (No. 21).

As with the Phase 1 features, the lack of Roman material from Structure 17 and its associated features might suggest that it belongs to a period when Roman pottery was barely reaching the site, and possibly to the Late Iron Age *sensu stricto*. It reinforces the suggestion that the enclosure ditches may have been open to receive material for some time after the internal structures had either gone out of use or were put to uses which did not generate the deposition of ceramic rubbish.

### Phase 3: Enclosures F-H (Nos 32-50; Figs 23 and 24)

Pottery was present in the ditches of Enclosures F (Ditch 7), G (Ditch 9) and H (Ditch 1504). In the interiors of Enclosures F and G, pottery came from a sub-enclosure and a number of burials, ditches, and pits. These are alluded to below, as appropriate.

The phase assemblage amounted to 1083 sherds, weighing 8160g (ASW 7.5 g). Fabric distribution is shown in Table 5. The majority of the pottery from this phase came from the Enclosure F and G ditches (7 and 9), which between them contained c. 67% of the phase assemblage (by number of sherds, or 63% by weight). Only a handful of sherds came from the southern ditch (1502) of Enclosure H.

The handmade material belongs to the same ceramic phase as that from Site Phases 1 and 2. The proportion of Roman material has, however, increased significantly, to c. 23% number of sherds (c. 35% by weight, Table 5). It is also much more widely distributed, occurring in virtually every assemblage of any size, with the notable exception of Ditch 18, which sub-divides Enclosure F. In Ditch 7, as in Phase 2 Ditch 6, the earliest Roman material is a small amount of rusticated ware, conventionally dated to the period c. AD 70-130. Most of the Roman material (Nos. 35-37, and unillustrated carinated jar sherds) appears to be of similar date to the Ditch 6 material already alluded to. Samian and a mortarium, which make their first



Fabric category	% no. (n = 1083)	% weight (n = 8160g)
Daub/fired clay	5.1	2.3
Handmade, temper uncertain (H)	3.0	0.6
Calcareous (H1)	12.0	17.4
Stone temper (H2)	32.5	27.2
Vesicular (H4)	24.2	17.8
Roman greyware RG)	22.6	33.6
Rusticated ware (RGRUS)	0.1	0.2
Mortaria (RM)	0.1	0.7
Roman oxidised ware (RO)	0.2	0.1
Samian (RS)	0.3	0.1
Totals	100.1	100.0

Table 5. Phase 3 pottery fabric distribution

appearance in this phase, are also of 2nd-century date. The latest material, however, from fill 1481 of Ditch 7 (not illustrated) is probably two joining sherds of a straight-sided flanged bowl in a dark-faced light-firing fabric. Such fabrics, distinct from later Crambeck wares, are available in the Humber region throughout the 2nd century, though the form in question here suggests that some level of deposition into the enclosure ditches, perhaps during the silting and slumping process, was taking place into the early to mid-3rd century. The radiocarbon determination of AD 70-260 on an animal bone from this phase generously encompasses all the aforementioned material (see Table 11).

It is appropriate here to consider selected features individually:

Three graves (111, 131 and 1341) contained small pottery assemblages in their fills. In each case, the latest material was a sherd of wheel-thrown grey or oxidised ware, the remainder being scraps of hand-made material. The greyware sherd from 111 is a rim fragment, possibly from a carinated jar, in which case a 2nd-century date would be appropriate.

Post-hole 121 contained sherds from a loop-handled greyware jar in a 2nd or early 3rd-century fabric, while gullies 1570 and 1511 each contained greywares in association with hand-made (H2) material. In the case of 1511, the greywares included sherds with burnished acute-angled lattice.

Ditch 23, which partly defined the sub-enclosure in the north-east corner of Enclosure F, contained 24 sherds (ASW 15.3 g), eleven of which were Roman. The hand-made material had a significantly higher ASW (20.3 g) than that of the Roman material (8.0 g). The earliest and most diagnostic Roman material comprised two samian sherds from Central Gaulish dishes or bowls, one Antonine and the other

Hadrianic or Antonine. A mortarium was probably produced in the York/Malton area in the 2nd century. It may be noted here that a Trajanic coin (AD 98-117) also came from Ditch 23. Most of the rest of the material would fit in the broad Antonine-Severan date-range which is appropriate to much of the Roman pottery from the site (No. 40). It would be possible to interpret a single vessel (No. 41) as a late 3rd or 4th-century HOSM flagon, but such late material here is perhaps unlikely except as an egregious later intrusion.

#### Phase 4: Enclosure J (No. 51; Fig. 24)

The phase produced a small assemblage of 175 sherds, weighing 1361 g (ASW 7.8 g). Material came from the ditches of Enclosure J and its sub-enclosures (Ditches 24-28), as well as from pit 1536, corn drier deposits 505 and 1428, and gully 1562 of Structure 20. Fabric distribution is presented in Table 6.

Limited excavation took pace in the main enclosure ditch (28), though small assemblages were recovered from the fills of Ditch 36 (1380 and 1381). They amounted to seventeen sherds, of which twelve were of Roman manufacture. It is sufficient here to mention that these included a further sherd from a 2nd-century mortarium from the York/Malton area, and that a fragment of Roman building material, tegula or possibly bessalis, was also recovered. As the table shows, the phase assemblage reveals a further rise in the proportion of Roman material, which now reaches *c.* 55-56%.

The interior of the Group 28 enclosure was subdivided by the Ditches 24-27. These produced a combined mixed assemblage of 38 sherds, with the very low ASW of 3.8 g. A total of eighteen sherds were Roman, and these had a slightly higher ASW (6.5 g). There is nothing of evidential value in the assemblage, though the greyware fabrics suggest broad contemporaneity with the bulk of the Roman material from the site.

The fill of the corn drier in sub-enclosure J2 produced only eleven handmade

<b>Fabric category</b>	<b>% no.</b> (n = 175)	<b>% weight</b> (n = 1361g)
Ceramic building material (CBM)	0.6	5.7
Daub/fired clay	0.6	0.3
Calcareous temper (H1)	1.7	1.6
Stone temper (H2)	17.1	21.7
H2/RG	0.6	0.4
Vesicular (H4)	23.4	14.9
Roman greyware (RG)	54.9	50.6
Mortaria (RM)	0.6	4.6
Samian (RS)	0.6	0.1
Totals	100.1	99.9

Table 6. Phase 4 pottery fabric distribution



(H4) and four greyware sherds. All were low-weight body sherds of little evidential value. Finally, to the east of this corn drier was a small enclosure in sub-enclosure J6 (Structure 20). This feature produced only four sherds (ASW 5.3 g). All but one of these (H4) were Roman greyware, and two of them were recovered from sieved samples. The greyware fabrics would be consistent with the date proposed for most of the other material from the site.

#### Selected Un-phased Features

Many archaeological contexts could not be phased satisfactorily. Two of them, both pits, produced fairly large assemblages and may be mentioned briefly here.

Pit 1021, immediately west of Structure 8, contained 106 sherds, weighing 499 g (ASW 4.7 g). The assemblage contained only four sherds of Roman material. These included a sherd of rusticated ware and a greyware campanulate bowl, cf. Gillam (1970), Type 21, dated *c.* AD 160-200.

Pit 1586, cut by Structure 16 (Phase 3), produced 89 sherds, weighing 1619 g (ASW 18.2 g). Handmade material consisted of 66 sherds of H1, the remainder comprising large base and body sherds from a small number of wheel-thrown greyware jars. One sherd bore faint acute-angled lattice.

#### CONCLUSIONS

The handmade pottery from site Phases 1-3 belongs to the same ceramic phase and would appear to date from the closing stages of the regional Iron Age, probably the first centuries BC and AD. The boundary ditches of both the Phase 2 and Phase 3 enclosures were apparently open for the reception of ceramic material into the Roman period. The north-west enclosure (B) may not have been receiving material after the *c.* late 1st or early 2nd century AD, but in the main enclosure boundary ditches deposition may conceivably have continued into the late 2nd or earlier 3rd century. Excavation of the Roman settlement was unfortunately limited, but the available evidence suggests that there is little that need post-date the mid-3rd century, and that a broad Antonine to Severan dating would encompass the activity represented by the excavated pottery.

It is increasingly apparent in this region that, on non-nucleated rural sites, handmade vessels in 'native' tempering traditions may continue to provide the bulk of the pottery in use during much of the 2nd century. The picture at Bampton Lane is of a site with limited exposure to whatever influences might have fully Romanised its ceramic assemblages. A limited early integration into Roman trade networks is apparent, but the very low incidence of such adjuncts to a Romanising life-style as samian and mortaria is eloquent of the site's rural status.

## CATALOGUE OF ILLUSTRATED POTTERY

Vessels in H fabrics are handmade, and Romano-British vessels wheel-thrown, unless otherwise stated. The catalogue is presented by phase and in feature number order.

## Phase 1 (Fig. 22)

- 1\* H2. Jar. Coarse. Common reddish sandstone temper and perhaps iron slag, *c.* 2-4 mm. Temper extrusive on interior. Very dark grey core with pinkish light yellow margins and surfaces. Structure 1; roundhouse gully 1155, fill 1154; Phase 1
- 2\* H4. Jar. Brownish-grey corky vesicular ware. Cf. Challis and Harding 1975, fig. 49, no. 3 (Levisham Moor Enclosure A). Structure 1; roundhouse gully 1256, fill 1255; Phase 1
- 3\* H2. Fairly coarse. Moderate angular quartz, much *c.* 2 mm. Very dark grey with reddish-brown interior margin and exterior surface patches. Unmasked temper, the exterior being particularly harsh and lumpy. Carbonised deposits in neck. Cf. Challis and Harding 1975, fig. 46, nos 1 and 4 (Pale End). Structure 8; gully 1139, fill 1138; Phase 1
- 4\* H4. Jar. Grey. Cf. Rigby 1980, illus. no. 114 (Rudston, apparently from a 2nd-century AD assemblage, but possibly residual Iron Age). Rigby 1980, illus. nos 32 and 173, are probably related. Structure 14; roundhouse gully 1395, fill 1394; Phase 1
- 5\* H2. Jar. Rather globular jar with beaded rim. Sandy very dark grey fabric with red interior surface. Structure 14; roundhouse gully 1460, fill 1459; Phase 1
- 6\* RG. Jar? Fine pale buff fabric with worn very dark grey surfaces. Pit 1069, fill 1507; Phase 1
- 7\* RG. Jar. Grey with very dark grey surfaces. Cf. late 2nd to mid-3rd-century Black Burnished Ware forms such as Gillam 1970, 138 (*c.* AD 180-250); Wachter 1969, no. 465 (Brough on Humber); Rigby 1980, no. 62 (Rudston, perhaps mid-3rd century). Pit 1069, fill 1507; Phase 1
- 8\* H2. Jar. Fairly coarse. Common angular quartz over *c.* 2 mm. Very dark grey with reddish-brown inner margin in parts. Carbonised deposits on exterior. Pit 1069, fill 1507; Phase 1
- 9\* H2. Jar. Fine. Dark grey. Cf. a wide variety of everted rim jars in 2nd-century ditch groups at Rudston Villa (Rigby 1980). Pit 1069, fill 1507; Phase 1
- 10\* H2. Fine. Abundant angular quartz < 1 mm. Carbonised deposits on interior of rim. Pit 1069, fill 1507; Phase 1

## Phase 2 (Figs. 22 - 23)

## Enclosure A

- 11\* RG. Campanulate bowl with bifid rim. Fine sandy black fabric with pale margins. Cf. York form BM4, AD 120-200 (Monaghan 1997, fig. 398, no. 3966). Enclosure A; Ditch 6 (1157), fill 1022; Phase 2
- 12\* H2. Fine. Jar. Very dark grey with brown patches on both surfaces. Exterior well smoothed, interior very worn. Cf. Challis and Harding 1975, fig. 41, no. 9



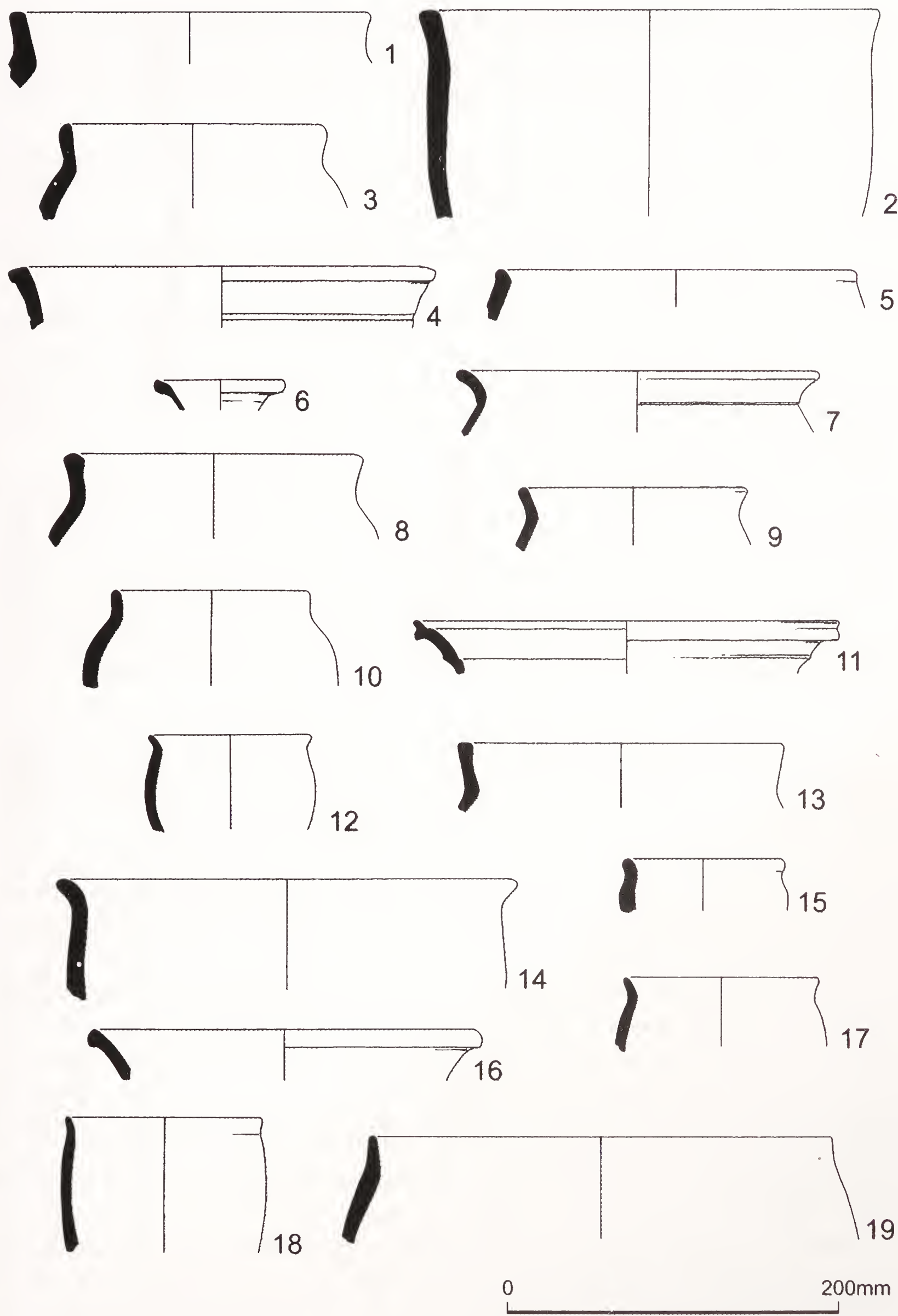


Fig. 22 Pottery (Nos. 1-19)

(Saltshouse School, Hull). Enclosure A; Ditch 6 (1182), fill 1180; Phase 2

13\* H2. Coarse. Jar. Very dark grey with brownish surface patches. Unmasked temper. Cf. Challis and Harding 1975, fig. 39, no. 7 (Faxfleet 'A'). Enclosure A; Ditch 6 (1182), fill 1180; Phase 2

14\* H2. Coarse. Jar. Very dark grey exterior with brownish patches, brown interior. Unmasked temper. Cf. Challis and Harding 1975, fig. 52, no. 2 (Costa Beck). Enclosure A; Ditch 6 (1182), fill 1180; Phase 2

15\* H2. Coarse. Jar/bowl. Fully reduced. Unmasked temper. Enclosure A; Ditch 6 (1182), fill 1180; Phase 2

16\* H4. Jar. Dark grey throughout. Enclosure A; Ditch 6 (1306), fill 1305; Phase 2

17\* H1. Jar with thinned everted rim, slightly dished on the interior. Reduced throughout. Moderate to abundant ill-sorted calcite and chalk to c. 2 mm. Visible temper on exterior, vesicular internal surface. Enclosure A; Structure 17; roundhouse gully 408, fill 1154; Phase 2

18\* H1. Jar. Abundant fine calcite and chalk < 2 mm. Brownish-grey with red margins and surface patches. Carbonised deposits on lower part of exterior. Cf. Challis and Harding 1975, fig. 39, no. 3 (Faxfleet 'A'). Enclosure A; Structure 17; roundhouse gully 1660, fill 1610 [with joining sherds in Pit 1613 (Phase 1)]; Phase 2

19\* H1. Jar with thinned upright rim and marked internal bevel. Abundant angular calcite, much in the c. 2-4 mm range. Brown core and dark grey surfaces. Carbonised deposits on exterior. Enclosure A; Structure 17; roundhouse gully 1660, fill 1610; Phase 2

20\* H1. Large jar. Simple bucket shape with internally thickened rim. Abundant ill-sorted calcite and chalk, much below c. 2 mm but occasionally up to c. 5 mm. Light brown throughout with reddish patches on exterior. Unmasked surfaces. Enclosure A; Structure 17; roundhouse gully 1660, fill 1610; Phase 2

21\* H1. Barrel jar with simple squared rim. Dark grey with reddish-brown patches. Fabric as No. 23. Carbonised deposits on upper exterior, and dark residues internally. An identical vessel, possibly the same one, occurs in fill 402 of Feature 1055. Enclosure A; Structure 17; roundhouse gully, 1660, fill 1609; Phase 2

22\* H1. Jar. Fabric as No. 23. Dark brownish-grey throughout. Cf. Challis and Harding 1975, fig. 41, no. 3 (Saltshouse School, Hull). Enclosure A; Structure 17; roundhouse gully 1660, fill 1609 [with joining sherds in Pit 1613 (Phase 1)]; Phase 2

23\* H2. Jar. Coarse, with abundant large angular quartz to c. 5mm. Very dark grey with reddish-brown areas on exterior. Light carbonised deposits over much of exterior. Cf. Challis and Harding 1975, fig. 33, nos 1 and 2 (Garton Slack), which are broadly similar forms. Enclosure A; Structure 17; roundhouse pit 1584, fill 1583; Phase 2

24\* H1. Large jar. Ill-sorted calcite and chalk to c. 5 mm. Very dark grey with light brown exterior. Variant of a common Late Iron Age type, cf. Challis and Harding 1975, fig. 36, no 1 (South Cave); fig. 49, no. 1 (Levisham Moor Enclosure A). Enclosure A; Feature 1055, fill 402; Phase 2



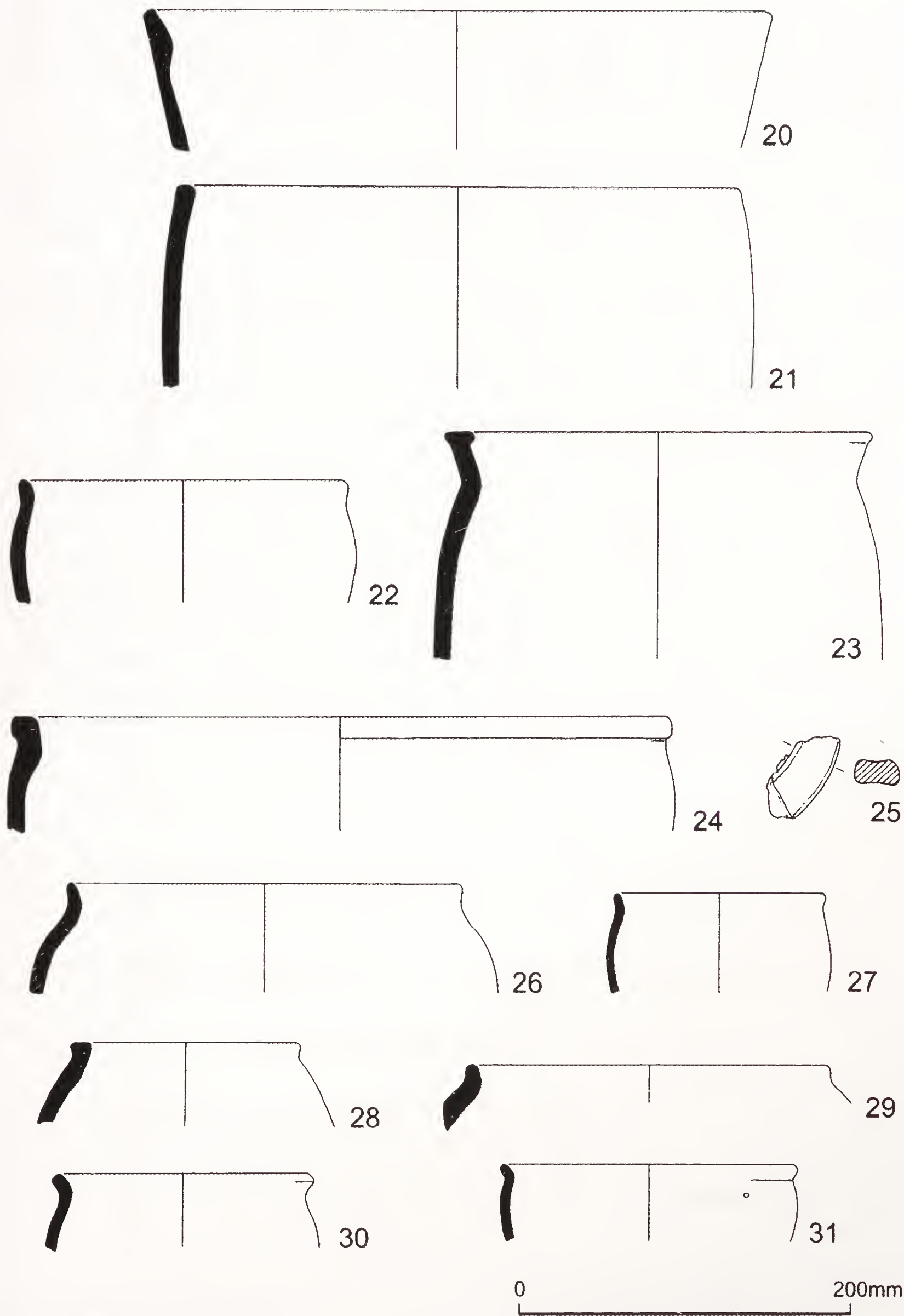


Fig. 23 Pottery (Nos. 20-31)

## Enclosure B

25\* H4. Jar. Fragment of 'plugged' handle. Light brown corky vesicular ware. Similar jar handles occur in Pit 1021. Cf. Challis and Harding 1975, fig. 51, no. 4 (Thornton Dale). Enclosure B; Ditch 3 (1015), fill 1014; Phase 2

26\* H2. Fine. Jar. Very dark grey with patchy light brown surfaces. Fairly close-knit sandy paste with occasional small to medium voids, particularly in the surfaces. Cf. Challis and Harding 1975, fig. 38, no. 8 (Gransmoor) and fig. 41, no. 3 (Saltshouse School, Hull). Enclosure B; Ditch 3 (1038), fill 1039; Phase 2.

27\* H2. Fine. Jar. Fully reduced. Abundant fine sand and common angular quartz, mainly < 1 mm. Carbonised residue on parts of interior. Cf. Challis and Harding 1975, fig. 52, no. 3. (Costa Beck). Enclosure B; Ditch 3 (1038), fill 1039; Phase 2

28\* H2. Jar. Coarse. Fully reduced. Sparse to moderate ill-sorted angular stone temper, including quartz, to c. 4 mm. Cf. Challis and Harding 1975, fig. 33, no. 9 (Garton Slack). Enclosure B; Ditch 3 (1038), fill 1039; Phase 2

29\* H4. Jar. Fully reduced. Common large voids. Cf. a range of similar vessels at Langton, e.g. Corder and Kirk 1932, fig. 7, no. 37; also Challis and Harding 1975, fig. 52, no. 2. Enclosure B; Ditch 3 (1038), fill 1039; Phase 2

30\* H2. Jar. Coarse. Fully reduced. Abundant angular temper, mainly quartz, to c. 3 mm. Temper extrusive on interior, but quite well masked on exterior. Slight carbonised deposits on shoulder. Enclosure B; Ditch 3 (1038), fill 1325; Phase 2

31\* H2. Jar. Fully reduced. Temper masked on both surfaces. A perforation has been made, post-firing, on the shoulder. Cf. Challis and Harding 1975, fig. 40, no. 2, which is somewhat smaller and more rounded (Faxfleet 'A'). Enclosure B; Pit 1001, fill 1000; Phase 2

## Phase 3 (Fig. 24)

## Enclosure F

32\* H4. Jar. Brownish-grey with reddish inner margin. Perhaps cf. Rigby 1980, fig. 36, no. 114 (Rudston). 2nd century AD? Enclosure F; Ditch 7 (105), fill 104; Phase 3

33\* H2. Fine. Jar. Dark grey with patchy brownish surfaces. Enclosure F; Ditch 7 (314), fill 312; Phase 3

34\* H1. Jar. Fully reduced. Ill-sorted calcite to c. 3 mm. Enclosure F; Ditch 7 (314), fill 312; Phase 3

35\* RG. Bowl with deep basal carination. Light grey with pale margins and darker surfaces. Extensive sooting discolouration on lower part of vessel. It may be part of the tradition represented by form BD at York, the 'post-legionary carinated bowl', with a date-range of c. AD 120-200 (Monaghan 1997, 1000-1002, cf. particularly fig. 397, no. 3941). Enclosure F; Ditch 7 (1061), fill 1060; Phase 3

36\* RG. Medium-mouthed jar. Pale grey with orange core in places. Not a closely datable form, being available in the Humber region from at least the late 1st or early 2nd-century AD, e.g. May 1996, fig. 20.5, no. 815 (Dragonby). It is unlikely to be much later



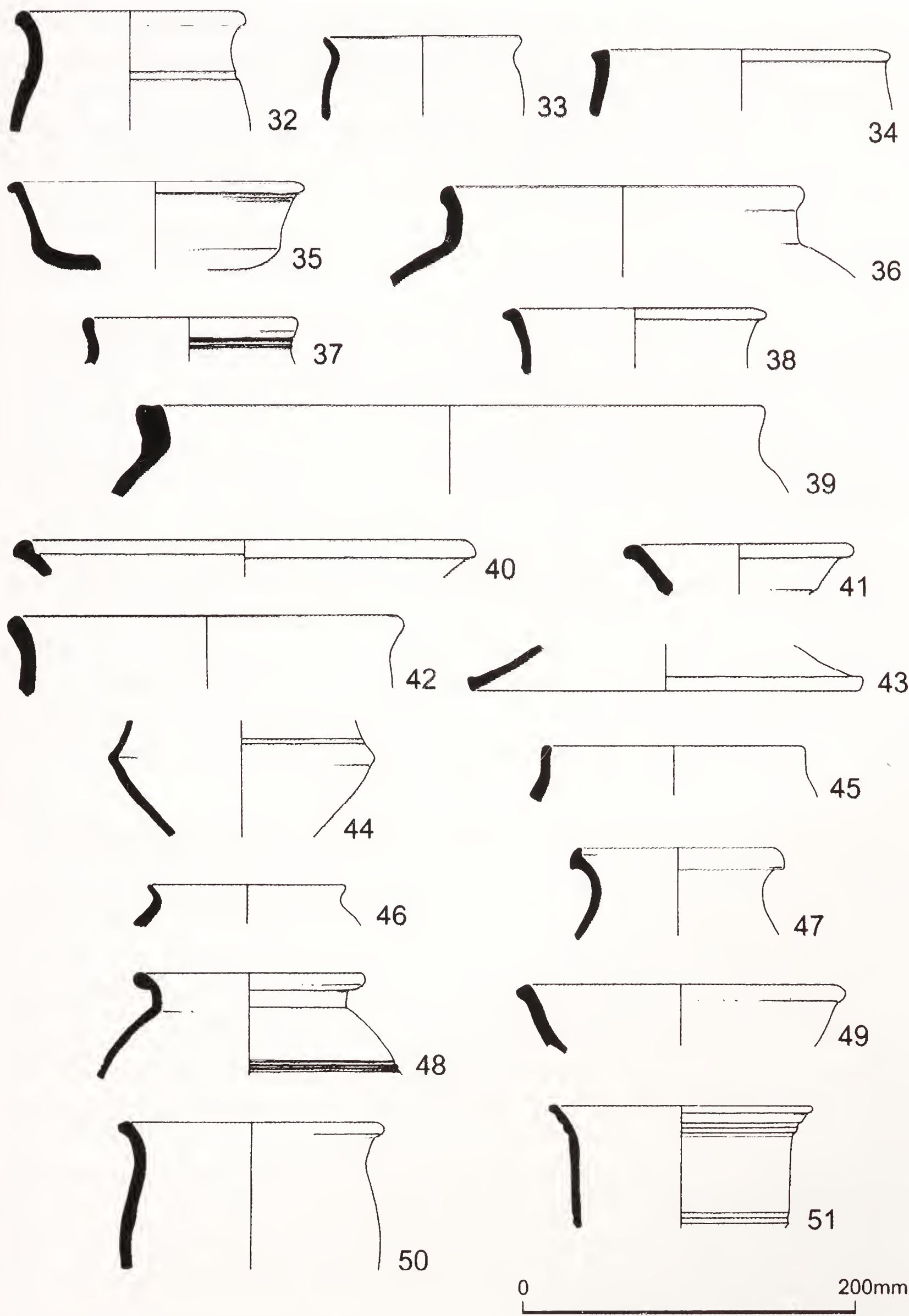


Fig. 24 Pottery (Nos. 32-51)

than the earlier 3rd century. Enclosure F; Ditch 7 (1061), fill 1060; Phase 3

37\* RG. Jar? Pale grey with light brown surfaces. Sooting on exterior. Enclosure F; Ditch 7 (1061), fill 1060; Phase 3

38\* H4. Jar. Light brown with very dark grey exterior, and rim interior to a depth of c. 10 mm. The vessel has possibly been used with a lid. Cf. Rigby 1980, fig. 33, no. 72 (Rudston). 2nd century AD? Enclosure F; Ditch 7 (1061), fill 1060; Phase 3

39\* H4. Large jar. Dark grey. A common form in the peri-Conquest period in East Yorkshire, cf. Rigby 1980, illus. no. 14 (Rudston) and cited parallels. Enclosure F; Partition ditch (1598), fill 1597; Phase 3

40\* RG. Dish with rim thickened both internally and externally. A common 2nd-century type on both sides of the Humber, with a probable overall date-range from the later 1st to the mid-3rd century (May 1996, 519-520). Enclosure F; Sub-enclosure ditch 23 (1170), fill 1171; Phase 3

41\* RG. Form uncertain, but possibly a late 3rd or 4th-century flagon, cf. Holme upon Spalding Moor form F3 (cf. Halkon and Millet 1999, figs 5.36 and 5.37). Enclosure F; Sub-enclosure ditch 23 (1170), fill 1171; Phase 3

42\* H4. Coarse. Abundant angular mixed stone temper, much over 2 mm. Some masking on exterior, but temper extrusive on interior. Reduced with red interior surface. Enclosure F; Sub-enclosure ditch 23 (1170), fill 1171; Phase 3

#### Enclosure G

43\* RG. Lid. Sandy black fabric with red margins. Enclosure G; Ditch 9 (1094), fill 1093; Phase 3

44\* RG. Lower body of carinated jar. Grey sandy fabric with yellowish-brown margins. Enclosure G; Ditch 9 (1141), fill 1140; Phase 3

45\* H2. Fine. Jar with flat-topped upright rim. Sparse sandstone to c. 2 mm. Dark grey with brownish interior. Carbonised deposits on interior of rim. Enclosure G; Ditch 9 (1141), fill 1140; Phase 3

46\* H4. Jar with curved everted rim. Reduced throughout. Enclosure G; Ditch 9 (1141), fill 1140; Phase 3

47\* RG. Constricted neck jar with ledged rim. Fine brownish fabric with thin grey core. There is a wide range of such jars, often with a cordon at the base of the neck, in northern England in the later 2nd and early 3rd century. May 1996, fig. 20.9, no. 916 (Dragonby) exemplifies the type. Enclosure G; Ditch 9 (1406), fill 1405; Phase 3

48\* RG. Necked jar. Fine blue-grey fabric. Enclosure G; Ditch 9 (1406), fill 1405; Phase 3

49\* RG. Dish with bead rim. Brownish sandy grey fabric. Late 2nd or 3rd century. Enclosure G; Ditch 9 (1406), fill 1405; Phase 3

50\* H4. Jar. Fully reduced throughout. Possibly cf. Challis and Harding 1975, fig. 48, no. 8 (Normanby)? Enclosure G; Ditch 9 (1406), fill 1405; Phase 3

Phase 4 (Fig. 24)



## Enclosure J

51\* RG. Carinated bowl cf. Gillam Type 185 (AD 120-140). The vessel is quite abraded and it is not possible to tell whether it once bore scroll or lattice decoration, which can occur on this type. Enclosure J; Pit 1536, fill 1535; Phase 4

## FLINT

*By Jason Dodds*

A total of 537 lithic fragments were recovered during the excavation. The material would appear to represent activity on the site from the Mesolithic period to the Bronze Age, although the vast majority was recovered as residual background finds in the deposits of Iron Age and Romano-British date. A possible exception to this is the concentration of flints recovered from layer 1674. This deposit, which produced 97 flint items, was incorporated into, and was possibly preserved by, a metalled surface at the entrance to a Phase 1 roundhouse (Structure 14).

The material was probably derived from the till deposits associated with the flanks of the Wolds and the coastline between Spurn Head and Bridlington (Brooks 2002, 192). Most of the assemblage consists of flakes and blades of largely undiagnostic form. The assemblage generally is discussed by perceived function, as the residual nature of the finds does not warrant a phase-by-phase analysis. A full report and catalogue of the whole assemblage forms part of the site archive. The select catalogue provided here focuses upon material from deposit 1674.

## Tools

The tool forms discovered account for approximately 16% of the total assemblage and, for the most part, represent pieces with a likely domestic function, such as scrapers and awls/piercers, although forms representing hunting activity are also present. The earliest evidence of hunting activity on the site is provided by six microliths of late Mesolithic form, as classified by Clark (1933). Scrapers provide the largest proportion of tool forms exhibited on the site (28% of tool forms). For the most part these scrapers (e.g. Nos 1-5) are made on broad flakes, which exhibit sub-parallel retouch, although some also have scalar and parallel retouch removals. These scrapers, to which may be attributed a Late Neolithic date, generally show clear evidence of wear associated with use. Many of them therefore probably represent discarded artefacts that had exceeded their usefulness (Foley 1981, 3).

The five knives recovered account for almost 6% of tool forms in the assemblage. Of these, two illustrate clear evidence of bifacial working, and one (No. 9) is denticulated on the opposing margin. Awls are relatively rare and account for just 3% of tool forms in the assemblage. Two of the awls (including No. 13) display scalar retouch removals. Other retouched pieces include 30 retouched flakes and sixteen retouched blades. Additionally, seventeen pieces from the assemblage exhibit clear evidence of platform preparation suggesting a significant degree of technical sophistication.

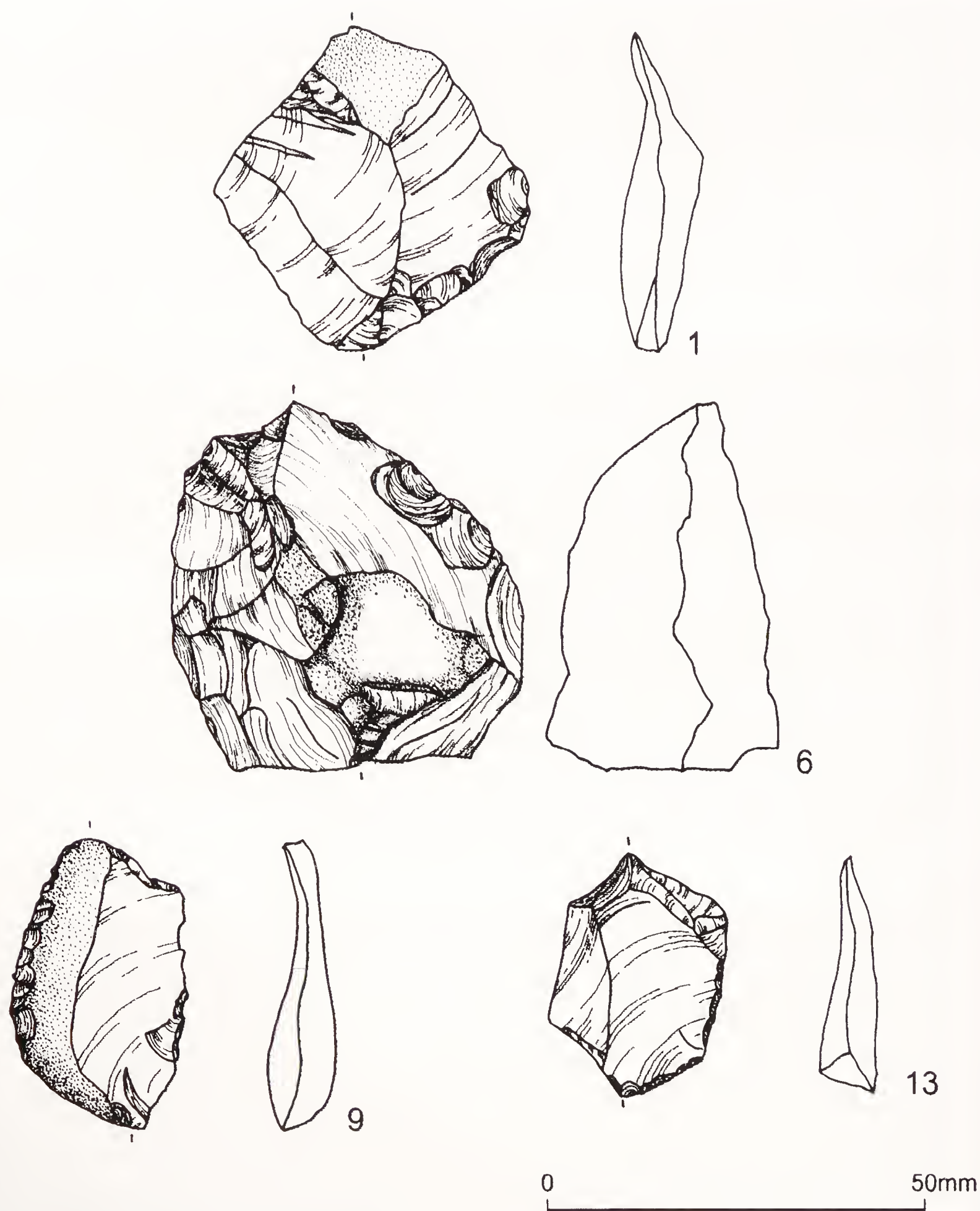


Fig. 25 Flint tools (Nos. 1, 6, 9 and 13)

### Cores and Flakes

Eight formal cores were recovered from the site, some of which illustrate a prevalence of blade removals (e.g. No. 6) and are likely to be of Neolithic date.

A total of 468 flakes form the largest proportion of the assemblage (75%). Of these, 41 represent primary flakes, suggesting that at least some initial reduction of flint nodules had occurred on the site. The site is, however, not necessarily deemed to be



a primary exploitation site, where an abundance of cores and cortical (primary) flakes would be represented (Dibble *et al.* 1997). Secondary flakes account for 32% of flakes recovered, but the largest proportion of the flakes recovered from the site represent tertiary flakes (over 58%), perhaps suggesting reuse of cores reduced elsewhere. Forty flint blades were also recovered from the excavations, artefacts being identified as 'blades' when they have a 2:1 length to width ratio. The majority of these were quite broad suggesting a Neolithic date (Brooks 2002). The excavations also recovered eight flint chunks.

#### Deposit 1674

Whilst the majority of lithic artefacts are derived from residual contexts, a noteworthy exception is provided by deposit 1674. This context forms part of the stratigraphic sequence of a 'metalled' surface at the northern entrance of a Phase 1 roundhouse (Structure 14). Artefactual material from this layer includes some hand-made Iron Age pottery, but is otherwise notable for a large assemblage of flint (over 30% of the total lithic assemblage). Artefacts from this context represent all stages of lithic manufacture and include several tool forms, including end scrapers (Nos 1 and 3-5), side a scrapers (No 2), a knife (No. 9), retouched blades and flakes (Nos 8 and 10-12) and an awl/piercer (No. 13).

The scrapers and other tool forms from this context are suggestive of a late Neolithic date. Given the quantity and concentration of this assemblage it is possible that 1674 represents a remnant of a knapping or 'living floor' that has been intruded and superimposed upon, and seemingly protected, by the entrance arrangement of Structure 14.

#### Catalogue (Fig. 25)

##### Layer 1674, Structure 14

1\* An end scraper made on the distal fragment of a secondary flake of dark grey flint. The working edge is represented by small sub-parallel removals, and shows clear evidence of use. The material appears highly comparable to No. 5, possibly from the same core. L. 35 mm; w. 35 mm; th. 9.5 mm. Structure 14; layer 1674; Phase 1

2 A side scraper made on the distal fragment of a secondary flake of dark grey flint with sporadic inclusions. The working edge is formed by a series of sub-parallel removals. The scraping edge shows clear evidence of use (wear). Edge damage is present on the left margin of the flake, most likely a result of post-depositional processes. L. 29.5 mm; w. 28.3 mm; th. 6.3 mm. Structure 14; Layer 1674; Phase 1

3 A poor quality end scraper made on a blade of mid-grey flint. The scraping edge, located on the distal end of the blade, is formed by a series of scalar removals. The working edge appears to be broken with only around 50% still present. L. 43.5 mm; w. 27.5 mm; th. 9.5 mm. Structure 14; Layer 1674; Phase 1

4 An end scraper made on a secondary flint flake of dark grey flint with sporadic inclusions. The scraping edge represented on the distal margin is in the form of sub-parallel rows of semi-abrupt retouch. The platform of the flake shows clear evidence of preparation. L. 55.5 mm; w. 55.7 mm; th. 19 mm. Structure 14; Layer 1674; Phase 1

- 5      A crude end scraper made on a secondary flake of light to mid-grey flint. The scraping edge represented on the distal margin of the flake is represented by abrupt scalar retouch removals. The proximal end shows evidence of partial platform preparation. L. 44 mm; w. 47 mm; th. 15.5 mm. Layer 1674; Phase 1
- 6\*     A spheroidal multi-directional core of dark grey flint. The core appears to be both a blade and flake core, with numerous removals evident upon all surfaces. Blade removals appear prevalent toward the lower end of the core. L. 58.2 mm; w. 45 mm; th. 29.5 mm. Structure 14; Layer 1674; Phase 1
- 7      A polyhedral core of light grey speckled flint with sporadic calcareous inclusions. The relative size of the core would make it extremely portable. The core shows clear evidence of removals across all plains of the upper surface. L. 46 mm; w. 37 mm; th. 19.5 mm. Structure 14; Layer 1674; Phase 1
- 8      A proximal fragment of a primary flake made on a dark grey semi-translucent flint. The lower left margin of the flake shows a small patch of sub-parallel retouch, which appears to show clear evidence of use-wear. L. 32 mm; w. 37.5 mm; th. 7.8 mm. Structure 14; Layer 1674; Phase 1
- 9\*     A knife made on a secondary flake of mid-grey flint. The left margin of the flint shows a series of sub-parallel removals. The opposing side appears to be denticulated by a number of semi-abrupt retouch removals. L. 39.5 mm; th. 9 mm. Structure 14; Layer 1674; Phase 1
- 10     A retouched blade made on light grey flint. The left margin of the blade is covered by a fine row of sub-parallel retouch. L. 52.5 mm; w. 25.8 mm; th. 5.7 mm. Structure 14; Layer 1674; Phase 1
- 11     A retouched blade made on a dark grey flint. The right margin of the blade has a number of sub-parallel retouch removals. L. 44.5 mm; w. 20 mm; th. 5.5 mm. Structure 14; Layer 1674; Phase 1
- 12     A retouched flint flake made on a light grey speckled flint. The flake forms a point as a result of a removal of two large flakes on its distal end. This point, which is fractured at the tip, may have been utilised as a piercing or boring tool. The left margin of the point has sub-parallel scalar retouch removals. L. 43.3 mm; w. 32.3 mm; th. 7.8 mm. Structure 14; Layer 1674; Phase 1
- 13\*    An awl made on a tertiary flint flake of dark grey speckled flint. The point of the tool is formed by a number of removals towards the proximal end of the flake. Scalar retouch is present to the left of this point. Retouch is also present on the left side of the flake in the form of sub-parallel removals, suggesting a multi-purpose function. L. 31.3 mm; th. 22.6 mm; w. 7.1 mm. Structure 14; Layer 1674; Phase 1



## QUERNS

*By Dave Heslop and Geoff Gaunt*

## Introduction

The excavation produced five quern or possible quern fragments, consisting of two possible saddle querns, one doubtful fragment and two rotary disc querns. All the fragments were recovered from Enclosure F, from deposits attributed to Phase 3 of the sites development. The two definite rotary quern fragments (Nos 2 and 5; Fig. 26 a and b) are of Romano-British type, which in this part of the world could date to anywhere between the 1st and early 5th century AD. Saddle querns continued in use in smaller numbers into the Romano-British period, but became significantly less common on sites in the later Roman period. The presence of two types in the same dating horizon might well indicate that Enclosure F was in use in the early Romano-British period, perhaps the late 1st to 2nd century AD, although native traditions might be expected to continue longer on relatively un-Romanised rural sites.

## Catalogue (Fig. 26)

1 Erratic, possibly used as saddle quern. Irregular cobble-like block with natural depression in one face which may have been used as a quern or grinding stone. That face is smoother than the other surfaces, but there is no clear evidence of use. The object is of sandstone of greywacke type, medium to dark grey, fine to medium (and sparsely coarse) grained with angular to sub-rounded grains, poorly sorted, highly compacted, with sparse muscovite and indeterminate dark mineral and/or rock-fragment grains. Ordovician or Silurian of southern Scotland or eastern Cumbria. Shape and lithology imply erratic. L. 290 mm; w. 190 mm; th. 82 mm. Enclosure F; Feature 1570, fill 117; Phase 3

2\* Disc quern. About 40% of a well-worn rotary bottom stone. Approximately 390-410 mm in diameter, 39 mm thick at outer wall, but only 27 mm at the eye. The grinding face is slightly concave, smooth but not polished, and with slight concentric striations, but no dressing. The sloping outer wall has vertical chisel tooling. Geologically the quern is of pale grey sandstone, fine to (mainly) medium grained, fairly well sorted, fairly well compacted. Middle Jurassic. Diam. 390-410 mm; th. 27-39 mm. Enclosure F; Feature 1570, fill 1500; Phase 3

3 Possible saddle quern. Metamorphic rock probably used as quern or rubbing stone. The gently convex upper surface is much smoother than the other surfaces and the edges of the lower surface have been crudely worked with hammer-pecks. Roughly oval in plan, with one end broken in antiquity. Variably pale to medium ('rusty' looking) brown rock, consisting mainly of a single mineral type that has a silvery sheen in reflected light, is well (and thinly) cleaved. It has a hardness *c.* 5 on Moh's Scale, and is randomly orientated; it looks like muscovite but is too hard, and may be kyanite, sillimanite or a platy cleaved amphibole. Probably from the eastern Grampian highlands. Erratic, strongly weathered despite retained hardness. Cracked in places, either by fire or impact. L. 240 mm; w. 232 mm; th. 75 mm. Enclosure F; Gully 22 (309), fill 308; Phase 3

4 Sandstone fragment. Block with one curved side, which may be the edge of a rotary quern, but without any tooling on any of the surfaces. The object is of pale

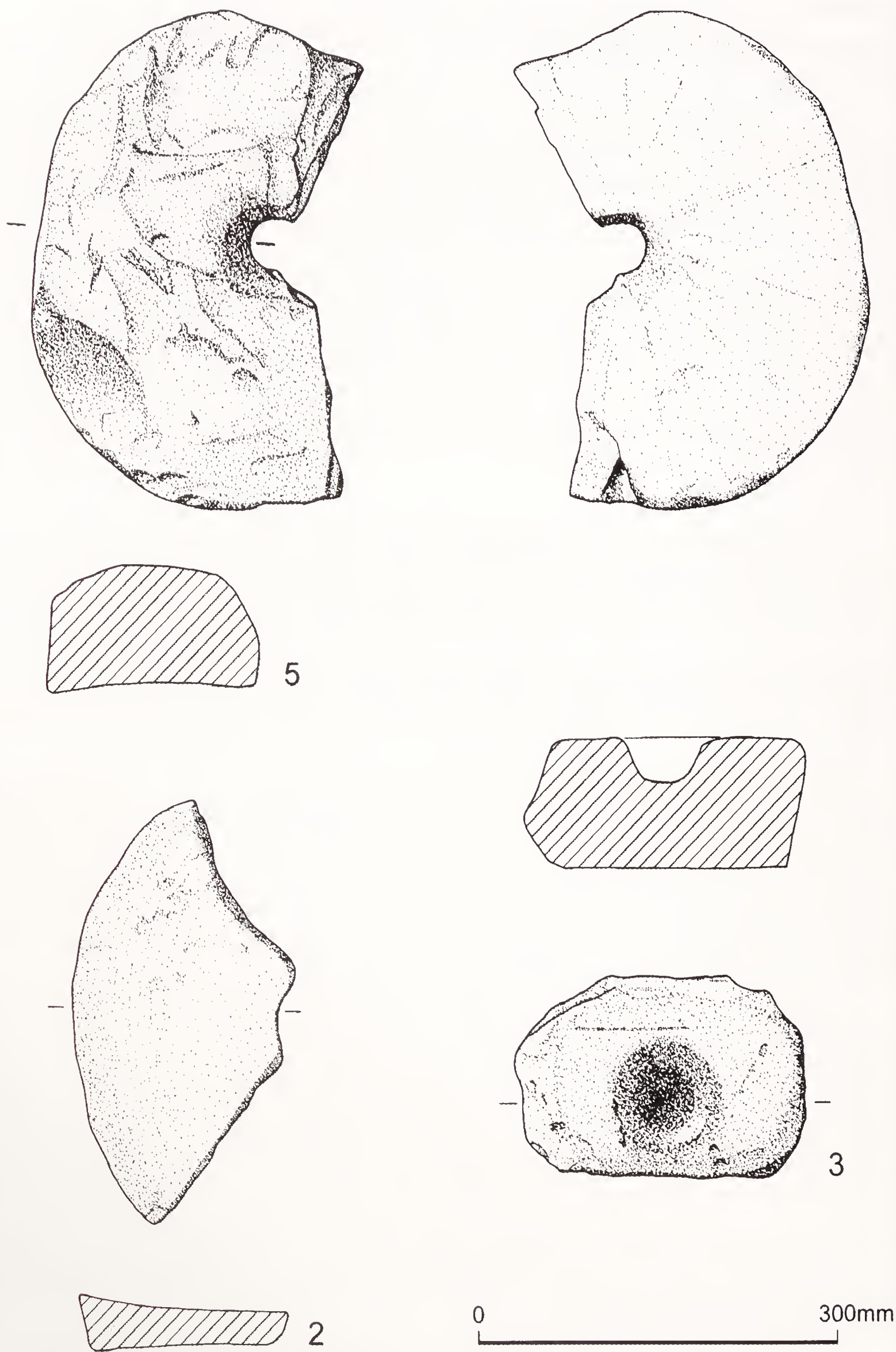


Fig. 26 Querns Nos. 2 and 5, Pivot stone No. 3



brownish-grey sandstone, fine to (less commonly) medium grained, moderately sorted, well compacted, fairly thin bedded, with sparse minute muscovite and traces of small-scale scour marks. Upper Carboniferous or (much more likely on grounds of proximity) one of the non-marine sequences in the Middle Jurassic of north-eastern Yorkshire (i.e. the Saltwick Formation, Sycarham and Gristhorpe members of the Cloughton Formation, and the Scalby Formation). Shape suggests erratic, with weather-etched thin bedded but no obvious artificial trimming or wear. L. 245 mm; w. 117 mm; th. 90 mm. Enclosure F; Ditch 7 (1279), fill 1278; Phase 3

5\* Disc quern. About 60% of large rotary quern, diameter 440 mm, 94 mm thick at outer edge and 67 mm at the eye. Broken through eye. The lack of any working on the non-grinding face surface suggests that it is a base stone, but the presence of a small handle hole sectioned by the fracture show that it is a topstone. The handle hole is conical, diameter 25 mm and length 46 mm. The outer walling is almost vertical and has uneven hammered tooling. The grinding face has very pronounced, crudely-worked, radial tooling, which does not appear to have been used at all after the dressing, as all of the surface irregularities of the tooling are still visible. Object is of pale brownish-grey sandstone, fine to (less commonly) medium grained, moderately sorted, well compacted, fairly thin bedded, with sparse minute muscovite and traces of small-scale scour marks. Upper Carboniferous or (much more likely on grounds of proximity) one of the non-marine sequences in the Middle Jurassic of north-eastern Yorkshire. Diam. 440 mm; th. 67-94 mm. Enclosure F; Structure 16; post-hole 1636, fill 1637; Phase 3

## OTHER ARTEFACTS OF STONE

*By Hilary Cool, Ian Roberts and Geoff Gaunt*

Apart from the querns only three potential stone artefacts have been identified (out of a total assemblage of eighteen recovered during the excavations). A perforated chalk erratic and a fragment of sandstone are by no means definite artefacts. A smooth chalk cobble stone (No. 1) has a very regular hole angled through it which could be a natural phenomenon or the result of drilling. An angular fragment of sandstone (No. 2) has possibly had one of its surfaces artificially smoothed and may be considered to have seen some slight usage as a hone. Both of these items were recovered from Phase 3 deposits, whilst a door pivot stone (No. 3; Fig. 26c), was found unstratified in Trial Trench B. The pivot stone is essentially an undressed block of sandstone that had been planted in the ground with its one of its flatter surfaces uppermost. The smooth weathered nature of this surface would suggest that all but 20 mm of the stone had been buried below ground. The pivot hole measured 75 mm in diameter and had a cone shaped profile to a depth of 35 mm. Similar pivot stones have been found in association with an Iron Age roundhouse at Percy Rigg on the North York Moors and Romano-British roundhouses in Cumberland (Close 1972, 29-30, fn 1, fig. 10). Similar example have also recently been found in association with a roundhouse entrance at Newbridge Quarry, Pickering and with a late Roman sunken floored building at Wattle Syke, Boston Spa. This example was found in the vicinity of the possible Phase 3 structure represented by feature 1570, the same feature that yielded the potential loom weight.

## Catalogue (Fig. 26)

1 Possible loom weight or curio. Smooth stone of white, very fine grained chalk, whose shape implies an erratic. The angled perforation of 25 mm diameter could be natural; a 1 mm thick lining of finely crystalline calcite within it could be the outer layer of a belemnite or a burrow lining, but the almost consistent diameter could alternatively result from drilling. The outer surfaces are naturally smooth and un-worked, the edges around the hole are chipped and where the original internal surface of the hole can be seen there are no obvious signs of working. It is possible that this is not a manmade artefact, but merely a stone with a fortuitous hole. It could have been utilised as a weight of some kind, but equally it might just have been picked up as a curio. L. 111 mm; w. 67 mm; th. 27 mm. Enclosure F; Feature 1570 (1511), fill 1151; SF 4; Phase 3

2 Possible hone stone. Irregular fragment of pale brown, medium and coarsely grained Upper Carboniferous or Middle Jurassic sandstone. One surface possibly artificially smoothed and suggestive of slight hone usage. L. 70 mm; w. 45 mm. Enclosure F; Ditch 7 (1279), fill 1278; Phase 3

3\* Door pivot stone. Sandstone, greyish-white (weathering to pale brownish-grey), fine grained. Jurassic, most likely lithostratigraphic sources being on the North York Moors. An irregularly shaped stone block, possibly trimmed down from an erratic, the full depth of which remains unknown as, having been buried upside down, its underside was planed off during machine stripping. The stone had originally been set to function with its widest and flattest side proud of the ground surface by about 20 mm, as can be ascertained from the smoother weathered surface. The drilled pivot hole, 75 mm wide, 35 mm deep and with a cone-shaped profile, was positioned approximately centrally. L. 240 mm; w. 150 mm; th. 110 mm (curtailed). Enclosure F; Trial Trench B; unstratified

## METALWORKING DEBRIS

*By Jane Cowgill*

A relatively small assemblage of metalworking debris (264 g) was recovered from features attributed to Phases 1-3 in the western part of the site, although some 55% of the material by weight (hearth bottom and crucible fragments) is derived from the Structure 14 roundhouse gully (Phase 1). The slag was identified solely on morphological grounds with the aid of a x10 binocular microscope and the results summarised in Table 7. The soil in all the bags containing slag was also checked with a magnet for hammer-scale though none was found.

Most of the slags are the by-products of iron smithing - the forging, repair or recycling of iron objects. There are a number of distinctive types of slag from this site but it is a disparate assemblage with no cohesive groups identifiable. The only factor that is common to all the pieces is the fact that coal was consistently used as the fuel for the iron smithing.

The single sherd of a triangular crucible that has evidently been used to melt a



Context	Provenance	Type	No.	Wt	Craft	Fuel	Comments
1058=1454	Structure 14; Phase 1	CRUCIBLE	1	28g	Cu-wking		Vitrified triangular crucible with copper alloy covering the internal surface.
1058=1454	Structure 14; Phase 1	HB	1	118g	Fe smith	Coal	Very dense; not plano-convex; most missing; outer rim of tuyere visible on the back.
1010	Enclosure D; Pit 1009; Phase 2	CLINKER	1	<1g		Coal	Burnt coal.
1034=1597	Enclosure F; Ditch 18; Phase 3	PROTOHB	1	46g	Fe smith	Coal	One on top of another; cindery; large quartz inclusions; 40 x 35 x 40mm (c. 15 + 20mm).
1143	Enclosure F; Sub-enclosure ditch Phase 3	SLAG	1	10g			Glassy with lots of flint inclusions; probably vitrified clay.
1142	Enclosure F; Phase 3	SLAG	1	24g	Fe smith	Coal	SSL/HR fragment
1152	Pit 1153; Phase 2 or 3; Unphased	PROTOHB	1	38g	Fe smith	Coal	Abraded; very dense; dark grey/purple colour.

Codes used in the above table.

Cu-wking	Evidence for the melting of a copper alloy
Fe smith	Iron smithing slag
HB	Plano-convex slag accumulations (commonly known as hearth bottoms)
PROTOHB	A small or part formed plano-convex slag accumulation
SSL	Smithing-slag lumps

Table 7. Summary of the metalworking slags and related finds

copper alloy prior to casting is not an uncommon find from sites of this date and they are usually interpreted as evidence for itinerant metal smiths. The fact that both the crucible and one of the hearth bottoms were found in the roundhouse terminal fill 1058=1454 need not imply that the structure was specifically used for metalworking.

IRONWORK

By Hilary Cool

Only eight items of diagnostic ironwork exist within a total recovered assemblage of twelve items. Six of these are from two features, only one of which (1570) is phased. The assemblage consists of a ring, a spike, five nails and a fragment of a large-headed

nail or stud, none of which is particularly diagnostic. The head of the latter (No. 4) appears unusually bright on the X-ray as if it might have been plated, which might indicate that the item was of medieval or later date as the technique does not become common until then. None of the other iron items are independently datable, although item No. 1 is typical of the size of nails found on Roman sites.

### Catalogue

- 1 Iron nail, complete. L. 52 mm. Feature 1570, fill 117; Phase 3
- 2 Iron nail, complete apart from tip. L. 87 mm. Feature 1570, fill 1500; Phase 3
- 3 Iron stake. Ends broken. L. 123 mm. Feature 1570, fill 1500; Phase 3
- 4 Iron: nail or stud flat head fragment. Head may originally have been plated. Head diam. c. 20 mm. Pit 1586, fill 1585; un-phased
- 5 Iron nail head and shank fragments. Pit 1586, fill 1585; un-phased
- 6 Iron nail. shank fragment. Pit 1586, fill 1585; un-phased
- 7 Iron nail, complete, broken in two. L. c. 115 mm. Feature 119, fill 116; un-phased
- 8 Iron ring. Diam. 50 mm. Feature 127, fill 126; un-phased

### COIN

*By* Craig Barclay

A single Roman coin was recovered from pit 1223 where it was found in association with a neonate burial (1222) in Enclosure F. The coin is well worn, such that the attributes of the deity/personification on the reverse design, of a draped, standing female figure, cannot be ascertained. Coins of this type continued to circulate well into the 3rd century, though this coin had perhaps enjoyed a century of circulation before being deposited.

### Catalogue

- 1 Bronze Dupondius of Trajan, struck in Rome c. AD 98-117

Obv.: Radiate bust (right)

Rev.: Draped standing female figure

Wt. 9.06 g. Enclosure F; Pit 1223, context 1222; Phase 3



## HUMAN REMAINS

By Malin Holst

## Introduction

A total of six infant burials were recovered from within Enclosure F and are thus attributed to Phase 3. All six burials were found in small sub-circular features, measuring approximately between 0.3 m and 0.5 m wide and ranging in depth from 0.1 m to 0.15 m. Five of the burials were concentrated in the north-eastern sub-enclosure, while a sixth infant (1621) was found approximately 25 m to the south.

## Preservation

Although skeletons of infants are usually presumed to be more fragile than those of adults, age was not a factor in skeletal preservation on this site. Two of the skeletons were moderately well preserved, with several post-mortem breaks, as well as moderate bone erosion. Three skeletons were well-preserved, with few post-mortem breaks and little bone surface erosion, whilst the sixth infant was of excellent preservation (Table 8). Skeletal completeness varied greatly, ranging from 25% to 90%, but all six cases are notable for the preservation of even the tiny bones, such as the distal digits of the fingers and ear bones.

## Assessment of Age

The ages of children can be divided into a number of categories, including foetus (up to 40 weeks *in utero*) and neonate (around the time of birth). Age in this assemblage was determined using standard ageing techniques specified by Scheuer and Black (2000a; 2000b).

The mortality rate of premature infants is still high today, and must have been much greater in the past. One of the skeletons (130) was of a foetus, thirty-eight weeks old. The fact that this individual was not found in the pelvic cavity of the mother suggests that it was born pre-term. This is however, not necessarily the case. Caesarians are known to have been carried out in pre-Christian times, but usually only in those cases in which the mother had died and an attempt was made to save the foetus (Francome *et al.* 1993, 11). The degree of Roman influence on this site is debateable, but it is notable that a Roman law (*Lex Caesarea*), dating to 715 BC, implies that, in early Roman society at least, burial of the foetus in a separate grave to that of the mother was common practice (Francome *et al.* 1993, 12).

Three of the skeletons (110, 1222 and 1262) were all about the same age, between birth (40 weeks gestation) and two months old. It is possible that they were stillborn, or had died soon after birth.

Age could be determined more accurately in a fifth individual (1340), who had died aged between two and four weeks, suggesting that this neonate had survived birth, but succumbed within the neonatal period (one week to one month after birth). The sixth individual (1620), buried by itself in the southern part of the enclosure, was probably older than the others, and was extremely well-preserved. This individual was between one and three months old.

Burial	Preservation	Completeness	Age Group	Age
110	good	55%	neonate	birth-2 months
130	moderate	60%	foetus	38 weeks gestation
1222	good	90%	neonate	birth-2 months
1262	moderate	25%	neonate	birth-2 months
1340	good	85%	neonate	2-4 weeks
1620	excellent	70%	neonate	1-3 months

Table 8. Summary of skeletal preservation, completeness and age distribution

Perinatal mortality (mortality during birth and up to one week after birth) depends on a number of factors, including infection, but also the health and age of the mother, her height, how many children she has had, and on her social class. Better nourishment, taller stature, better education and control of the number of pregnancies in upper class females leads to greater infant survival (Rhodes 1995, 137).

Sex Determination and Metric and Non-Metric Analysis

Sex could not be established in any of the individuals from Bempton Lane, as sex determination relies on the development of sexual characteristics of the skeleton, which do not develop until late puberty or early adulthood. Whilst complete long bones were measured to establish the age of the neonates, stature could not be determined because the long bones need to be completely fused to calculate the height of the skeleton. Equally, non-metric traits usually only become apparent once the major skeletal elements are fused and were therefore not recorded in this small population.

Skeletal and Dental Pathology

Two of the skeletons (1222 and 1620) displayed evidence for woven bone formation on a number of skeletal elements. Woven bone is characterised by additional bone formation on the bone surface. It can occur as a response to bone surface inflammation, but also represents normal growth of the developing skeleton. The cause of these inflammatory lesions is currently not completely understood (Roberts and Manchester 1995, 130; Aufderheide and Rodríguez-Martín 1998, 179). In children they may be due to direct and minor trauma, especially resulting from the forceful handling of a child (Walker *et al.* 1997, 204). The woven bone formation in the two neonates from this site was concentrated on the long bones, the maxillary palate and the external surface of the ribs. The distribution was symmetrical and bilateral suggesting that it was growth-related, rather than the result of non-specific or specific inflammation, which tends to affect the bone surface more irregularly.

Evidence for pathology was noted in a two to four week old neonate (1340), who suffered from severe atrophy of the long bones, particularly the right femur. Atrophy, or wasting of the bone, is characterised by bone loss in size and substance. The long bone shafts were considerably thinner than those of other individuals in the same age group. Apart from neurological disorders, a possible cause for the



wasting of this infants limbs may be spinal muscular atrophy (Werding-Hoffman disease), causing the infant to be weak and move very little, with death occurring before its first birthday (Levene 2000, 19). A further cause for limb atrophy may have been tight swaddling of the baby with the aim of preventing limb malformations which could occur in children with rickets (Sweet 1997, 820). As rickets was not common until the 17th and 18th century (Roberts and Manchester 1995, 174), this is probably the least likely cause.

No dental pathology was observed in any of the tooth buds recovered.

### Discussion

Infant burials are frequently found on later Romano-British non-cemetery sites (Mays 1993). Mays has analysed the age distribution of infants from Roman cemetery and non-cemetery sites and his findings suggest that burials from Roman non-cemetery sites were usually full term babies. Full term neonates may be stillborn or die of natural causes during, or immediately following birth, but they may also die as a result of infanticide. Infanticide is usually carried out immediately following birth, implying that victims of infanticide should fall within a very narrow age range (Smith and Kahila 1992, 668). Alternative reasons for infanticide could be attempts to limit population or family size, poverty, illegitimacy, the wish to have no children, or if the child was not of the desired sex (Mays 1993, 887). The relatively wide age distribution of the limited number of burials at Bampton Lane would, however, not support the theory of infanticide, at least not for all six burials. It is therefore probable that the reason for burial of this group of infants at this site was different. Those burials that are discovered archaeologically, tend to be found in unusual places, such as in or near buildings (at temple or shrine sites or villas), in ditches, pits or wells (Watts 1989). According to Pliny, it was not customary to cremate those infants who had died before teething (quoted in Watts 1989, 372). It is possible, that the high incidence of child mortality meant that infants did not warrant the expense of formal burial or cremation, and it is notable that even as late as 1927, stillbirths were not counted as 'proper' births (Elbourne 1981, 19).

The Romano-British custom of non-cemetery disposal of infants may have been a continuation of the Iron Age practice of placing infants in pits, ditches and rubbish dumps (Fulford 2001). Other partial and complete infant burials are also known from an Iron Age site at Baldock and Roman sites at Portchester (Fulford 2001). Vicars Farm and Earith in Cambridgeshire (Dodwell *pers comm.*) and Biddenham Loop in Bedfordshire (Holst 1999). They are often associated with animals, particularly young animals (Fulford 2001). In fact, neonates have been excluded from communal burial since the Neolithic; and even in Christian contexts they are often set apart from the main part of the cemetery, particularly in liminal areas (Scott 1999, 124). This suggests, that infants played a significant cultural role in society. They were associated with fertility, rebirth, monumentality, memory and liminality (Scott 1999, 124) and were often found in agricultural contexts, especially in the 4th century AD (Scott 1991, 120), perhaps as a response by females to the changes in their world, and an attempt to gain greater control of agricultural production, via fertility rituals associated with neonatal burial.

The skeletal evidence from Bempton Lane suggests the deliberate burial of neonates in a non-cemetery setting, probably for cultural reasons, rather than with the aim of disguising victims of infanticide. It is probable that all six infants died of natural causes, and evidence for a pathological condition in the form of birth trauma or a neurological disorder in one infant (1340) supports this theory. It is possible that the pre-term foetus was born normally, but the foetus may have been removed by caesarian section following the mother's death to enable separate burial according to early Roman law (Francome *et al.* 1993, 12).

### Conclusions

The six skeletons represent an age group ranging from an almost full-term foetus to a one to three month old infant. The fact that these infants had not all died at birth suggests that they are more likely to have succumbed to natural causes, and were not the victims of infanticide. One of the neonates suffered from wasting of the limbs, possibly due to paralysis. Although the presence of infants in non-funerary contexts is not an unusual finding on Iron Age or rural Romano-British sites, pathological manifestations in infants are extremely rare.

## ANIMAL BONE

*By* Jane Richardson

### Introduction and Method

A total of 5872 animal bone fragments were recovered during the excavation, most of which were assigned to specific phases of occupation (Table 9). Unfortunately, with the exception of the Phase 2 assemblage, too few bones were recovered to facilitate meaningful comparison between the phases of Iron Age and Roman occupation. For a statistically valid dataset, a minimum number of 500 identified elements is typically recommended (van der Veen and Fieller 1982, 296). Nevertheless, the bones were typically well preserved with few eroded bone surfaces and little sign of gnawing by dogs.

All bone fragments were identified where possible to species, species group (such as sheep/goat) or a lower order category such as 'large mammal' (Table 9). Age data were considered and butchery marks were noted, but due to the fragmentary nature of the assemblage and the quantity of bones modified by burning, no metrical data were recorded.

As no goat bones were identified, both sheep and sheep/goat bones are referred to collectively below as sheep.

### Results

#### Phase 1: unenclosed settlement

Only 235 bone fragments were associated with the unenclosed settlement (Table 9) with the majority (66%) coming from the fills of pit 1613. Cattle and sheep bones were most commonly represented (Table 10), while horses were also a valuable



Phase	1	2	1/2	3	4	Not phased
Cattle	32	86	6	64	2	2
Horse	14	22		21		1
Sheep/goat	58	(43) 534	8	26	2	1
Pig	2	108	2	14		
Dog	1	34		1	10	
Large mammal	86	108	26	180	4	1
Medium mammal	5	43		8		
Small mammal	36	4236	18	33		5
Water vole 1						
Field vole		1				
Microfauna		2				
Frog/toad		1		1		
Bird		1		1		
Undiagnostic			18	6		
Total	235	5176	78	355	18	10

Numbers in brackets refer to the sheep/goat bones that were identified as sheep  
Table 9. Summary of the animal bone fragments by phase

component of the rural economy. The presence of neonatal cattle bones as well as aged individuals is indicative of a breeding population, while sub-adult sheep and pigs attest meat production. Butchery marks were not noted on any the bones from this feature, however, although a sheep metatarsal had been worked. While horses would have been important as transport animals, their consumption during the Iron Age is also possible. Prohibitions against their consumption came much later with Pope Gregory III's edict in 732 (Rau 1968 cited in Grant 1988), although Roman consumption of horseflesh was resorted to only when the alternative was starvation (Toynbee 1973, 185).

Phase 2: Enclosures A and B

In total, 5176 bone fragments were assigned to Phase 2 (Table 9), although the majority came from atypical deposits within pits 1153, 1259 and 1735. Excluding these pit fills, most of the remaining bones were identified again as either cattle or sheep (Table 10). The proportion of horse bones had declined compared to Phase 1, while pig had increased slightly. The proportion of dog bones at 13% is the result of a single (fragmented) dog skull deposited as part of fill 1318 in the perimeter ditch of Enclosure B. Three butchered bones were noted, a cattle scapula and a sheep astragalus bore marks indicative of carcass reduction, while marks on a large mammal vertebra indicated meat removal.

Age data were limited, but two neonatal cattle bones, in addition to adult animals, attest the continued presence of localised cattle rearing. In the absence of sub-adult cattle, animals raised specifically for their meat were not identified. In contrast, the presence of sub-adult sheep and pigs indicate the availability of prime meat, while adult sheep probably represent a breeding population, as well as the targeting of milk and/or fleeces.

Just over 62% of the bones from Phase 2 (excluding the atypical pit deposits) were recovered from the gully and pits of the Structure 17 roundhouse. These bones were not solely the product of food preparation and consumption as might be expected from such a domestic setting. Bones more typically associated with primary butchery that would normally occur on the periphery of a site were also present, as well as bones from animals (e.g. horse) that were unlikely to have been consumed. As a result, these bones may have been redeposited from activities carried out elsewhere within the settlement.

The atypical pit fills included 4044 bones recovered from pit 1259. These are unusual as 4027 of them were burnt, on a site where only 2% of the assemblage was treated in this way. Most of these bones could only be identified as small mammal, but in addition, 193 sheep bones, 24 pig bones and one cattle bone were recovered. Age data from the sheep was limited, but indicated the presence of both adult and sub-adult (but not juvenile) animals. Three sheep bones also displayed butchery marks that indicate food consumption.

From pit 1153, 687 fragments were recovered and only sub-adult sheep and pigs were conclusively identified. The full range of body parts was represented and a few articulated parts and paired bones were noted. All the bones were in a similar condition and were of similar size and age, so it is possible that partial skeletons were deposited here. Some sheep and pig bones displayed butchery marks indicative of carcass dismemberment and a few bones of both species were burnt. This assemblage is likely to represent a single, atypical event, perhaps the deposition of partial carcasses after feasting.

Finally, an unusual deposit of 40 bones within pit 1735 was dominated by sheep metacarpals and metatarsals. These limb extremities are often removed during primary carcass processing when low-utility parts such as heads and feet are removed, although no accompanying skull fragments or phalanges were found in this deposit. They may also be carried with skins and be indicative of skin preparation and leatherworking, but again accompanying phalanges would be expected. Instead, it is possible that these specific bones had been gathered in preparation for working.

### Phase 3: Enclosures F-H

From Phase 3 deposits, 355 animal bone fragments were recovered, which represent the same range of domestic animals identified from Phases 1 and 2 (Table 9). An increase in the proportion of cattle over time, however, is now apparent, as well as a two-fold increase in the proportion of pigs. These increases were largely at the expense of sheep, which had declined to a low of 16% (Table 10). Such trends have been associated with the process of 'Romanisation', although non-Romanised rural settlements such as Bempton Lane usually maintained a relatively high percentage of sheep (King 1991, 17).



Species	Phase 1	Phase 2*	Phase 3
Cattle	39	42	56
Horse	17	11	19
Sheep/goat	40	28	16
Pig	3	4	6
Dog	1	13	1
Water vole	<1		
Field vole		<1	
Mouse-sized		<1	
Frog/toad		<1	<1
Bird spp.		<1	<1

\* excludes atypical deposits from pits 1153, 1259 and 1735

Large mammal fragments have been divided proportionally between cattle and horse, medium mammal fragments have been assigned to pig and small mammal fragments have been divided proportionally between sheep/goat and dog.

Table 10. Percentage of animals by phase

Again age data were scarce, but sub-adult and adult cattle, sub-adult pigs and adult sheep were noted. Meat production and the targeting of secondary products such as milk, wool and traction is likely but cannot be confirmed given the paucity of the data. The identification of osteophytic lipping around the acetabulum of a cattle pelvis may indicate work-related damage due to traction stresses, but age-related wear is also possible. Two butchered bones indicate carcass dismemberment: a cattle pelvis and a large mammal long bone.

A few bones were found in association with three of the infant inhumations (131, 1222 and 1620). Interestingly, all three burials contained a sheep's tooth, apparently a pattern not seen previously (Philpott 1991, 202).

Phase 4: Enclosure J

Too few bones were recovered from Phase 4 deposits to warrant discussion, with the exception of a partial dog skeleton from the perimeter ditch of Enclosure J. With the dog skull recovered from the Enclosure B ditch, these may represent so called 'structured deposits', which often take the form of complete skeletons, articulated parts, skulls or deposits dominated by the disarticulated bone of a single or unusual species (Grant 1989, 79; 1991, 109). With the exception of one dog tooth from Structure 14, all the dog bones retrieved from Bempton Lane were found in enclosure ditches. It is possible that dogs had a symbolic value to the inhabitants of this settlement, which persisted over time. The meaning of this symbolism is now obscure, however, but dogs (and also horses) have been identified as animals of particular symbolic significance in Iron Age Europe (Grant 1991, 110; Cunliffe 1992, 75). A highly structured example

from a sanctuary at Vertault (Côte d'Or), revealed over 40 horses and 150 dogs deposited according to strict spatial rules (Meniel 1992, 71 and 82).

### Conclusions

The phased assemblages are typically small in size and as a result are of questionable validity as economic and social indicators. Despite this limitation, however, trends were observed in the proportions of the main domestic 'meat' animals, which have been identified previously as direct indicators of Roman influence. An increase in cattle is related to military requirements for meat, while pigs were consumed in greater numbers as the Roman/Gallic diet was increasingly adopted (King 1991, 16-17). As a result, the perceived sheep-dominated economy of Iron Age Britain (e.g. Dalton Parlours, West Yorkshire - Berg 1990; Danebury, Hampshire - Grant 1984; Maiden Castle, Dorset - Armour-Chelu 1991) went into decline. Given these trends, perhaps the settlement at Bempton Lane was influenced by Roman occupation to a greater extent than perhaps would have been expected given its somewhat marginal location. Alternatively, perhaps the results place a question-mark over whether the later Iron Age, in this area at least, was quite so sheep-dominated.

Regardless of phase, age data were limited, but it is likely that some sheep, cattle and pigs were utilised for their meat when they had reached their optimum age and size (sub-/young adults), while the presence of adult animals suggests breeding populations (supported by the presence of neonatal cattle bones). Milk and fleece production may also have occurred and traction animals utilised. Such a multi-purpose strategy may have had lower returns than the intensive exploitation of one product, but it was also a lower-risk strategy. In addition, the possibility remains that livestock were exported to local or regional markets. Certainly, the Roman pottery indicates inclusion in regional markets in Yorkshire, North Lincolnshire and perhaps even further afield (see p. 87).

One final feature of the assemblage was the presence of atypical deposits, most commonly associated with Phase 2. A large number of burnt bones were contained in pit 1259, articulated sheep and pig parts were deposited in pit 1153, sheep metapodials were disposed of in pit 1735 (unphased) and dog bones were typically deposited in the perimeter ditches of enclosures (Phase 2: B, Phase 4: J). While the metapodials in pit 1735 may reflect a bone-worker's cache, the other deposits are harder to rationalise economically. The articulated, but butchered, sheep and pigs in pit 1153 may indicate a feasting event. This would represent a simple solution to consuming a large amount of meat when an animal is slaughtered but before it could spoil (McCormick 2002, 26), whilst also maintaining social cohesion, legitimising authority and perpetuating inequalities (Baker 1989, 115; Barrett 1991, 7; Turner 1992, 292). The burnt bones from pit 1259 may represent the loss or sacrifice of meat offered as part of a ritual, as burning was not the usual means for disposing of bones on this site. The placement of dogs or their heads in perimeter ditches may also be linked to ritualised activities (see above). Finally, the sheep teeth buried with human infants may be significant, although their symbolism is unknown.



## CARBONISED PLANT REMAINS

By Diane Alldritt

## Introduction and Method

Seventy-one samples of between 5-60 litres (usually 10 litres) were selected for processing. Samples that displayed clear visual potential (such as those from the crop drier), were processed, but otherwise the selection criteria demanded secure deposits associated with structures, pit fills and primary ditch deposits. Charcoal was recovered from 39 contexts, whilst carbonised cereal grains were recovered from seventeen contexts. Samples taken from the Phase 4 Roman corn-drying kiln produced the most abundant quantities of plant remains per litre of sediment.

The deposits rich in burnt bone from pit 1259 (Phase 2) were also relatively rich in preserved remains. The enclosure ditches and other features around the site produced far fewer plant remains, and these were often very degraded and not identifiable to species.

The carbonised plant material from each sample was identified with the aid of a low powered binocular microscope typically at magnifications of x10 and x20. Carbonised plant macrofossils, including seeds, nutlets, achenes, fruits and so forth are all referred to in the text as seeds in order to avoid confusion, with the exception of cereal grains which are distinguished as such. Common names are used for ease of discussion, for instance, barley, oats, wheat, but where these have been distinguished to species (e.g. hulled barley) it will be stated as such. The abbreviation cf. is used for tentative identifications, usually because the material was poorly preserved or degraded, or because the genus or species could not be confidently separated based upon the available material, whilst the abbreviation sl. (*sensu latu* - 'in the widest sense') is also used throughout the text where species cannot be confidently separated based upon current scientific guidelines. Plant nomenclature in the text follows Stace (1997) for vascular plants other than cereals, which follow Zohary and Hopf (2000). Carbonised remains were identified by reference to Beijerinck (1947), Schoch *et al.* (1988) and to modern plant reference material.

## Results

## Phase 1: Unenclosed settlement

## Structure 14

The fill of the Structure 14 roundhouse gully (1461) produced only one very degraded *Triticum* cf. *aestivum* sl. (bread/spelt wheat) grain. No other remains were present.

## Phase 2: Enclosures A-E

## Pit 1259

The upper tertiary fill of this pit (1260) contained a number of cereal grains and weeds of cultivation. An almost equal mixture of *Avena* sp. (oats), *Hordeum vulgare* sl. (barley) including some var. *vulgare* (hulled barley) and *Triticum* sp. (wheat) were identified. Possible wheat types consisted of emmer and bread/spelt wheat. The weed assemblage suggests the former presence of rough, grassy areas and possibly wet meadows nearby, or very grassy fields of cultivation. Numerous oat grains recovered

from the sample may also have been growing as a weed in barley or wheat fields.

The secondary fill of pit 1259 (1261) produced a large number of carbonised cereal grains and weeds of cultivated/waste places, in addition to weeds suggestive of damp meadows or grassy fields/pasture. The presence of numerous burnt peat fragments and a single piece of vitreous material (possibly slag or other industrial waste) might indicate that this material could have been used as fuel. It is possible that it occurs as the sweepings from domestic hearths and kilns from around the settlement, which may account for the presence of large numbers of cereal grain and weeds of cultivation in this deposit.

The primary fill of the pit (context 1272) contained fewer numbers of cereals and weeds of cultivation than the overlying deposit (1261), but a similar range of species was recovered. Oat, barley and wheat were present, together with cereal processing waste and weeds of cultivated/waste places.

### Phase 3: Enclosures F-H

#### Burial 1223

Three grains of *Hordeum vulgare* sl. (barley) were recovered from the grave fill (1222). It is possible that cereal grain was deposited in the grave fill as a votive offering (see Discussion).

#### Burial 1263

A single indeterminate cereal grain was recovered from the grave fill (1262).

#### Ditch 7

A single *Triticum aestivum* sl. (bread/spelt wheat) and one very degraded indeterminate carbonised cereal grain were the only plant remains recovered (contexts 1107 and 1162).

### Phase 4: Enclosure J

#### Corn Drier 1428

Four samples from different parts of the corn drier in sub-enclosure J2 were processed. Only one sample, that from the burnt deposits in the corn drier flue (1443), produced highly abundant quantities of cereal grain. The primary processed crop at the site appears to have been bread/spelt wheat, although barley was probably also cultivated. The plant material suggests that this was a relatively 'clean' crop, as few remains of chaff or weeds of cultivation were present. Numbers of recovered oat grain were also quite high and this may have been grown as a crop at this time, for instance for use as animal fodder. Deposition in this area of the corn-drying kiln probably did not occur in a single event, and this material may represent the charred remains of a number of firings. The flue area was the most productive in terms of cereal grain recovery from the kiln deposits, which may be because this area was difficult to sweep out and represented a primary area for preservation.

A sample of the material underlying the carbonised flue deposit (1682) contained only one bread/spelt wheat and a poorly preserved indeterminate cereal grain. The layer sealing the flue deposit (1712) contained a scattering of barley (including six-



row hulled barley), oats and bread/spelt wheat. Very few weeds of cultivation or chaff fragments were present. This material is most likely waste from grain drying/processing activities and consists of a similar range of species to the carbonised flue deposit (1443), although in fewer numbers.

A sample from the stoking area at the north-eastern end of the corn drier (1681) produced only a single carbonised grain of *Triticum aestivum* sl. (bread/spelt wheat).

#### Ditch 28

A single indeterminate cereal grain was recovered from the primary fill of the Enclosure J ditch (1543, sample 197).

#### Structure 20

Two samples of the fill of the gully of Structure 20 were processed. One yielded occasional cereal grains (barley and wheat) and a few weeds of cultivated/waste places (1559), whilst the other produced two grains of possible bread/spelt wheat (1561).

#### Unphased

Post-hole 1335 (northern part of Enclosure A/F)

A single *Hordeum vulgare* sl. (barley), and indeterminate degraded weed, and a piece of *Quercus* (oak) charcoal were identified. The oak may have been part of the original post, which has been burnt *in situ*, whilst the other plant remains are probably casual inclusions (context 1334).

#### Ditch 1542 (pre-dates Enclosure J, Phase 4)

A small number of cereal grains were identified from this feature, consisting of oats and wheat. No weeds were present. This material may be a dumped deposit of grain spoiled during cooking or during the later stages of cereal processing (context 1541).

#### Discussion

Very little can be stated about the earliest Iron Age activity on the site (Phase 1), due to the overall scarcity of plant remains recovered. The single grain of cf. bread/spelt wheat recovered was very degraded and may have arrived in this deposit as a result of bioturbation processes. By virtue of the plant remains recovered from the fills of pit 1259, there is a greater insight into the local environment and cultivation areas of the Phase 2 settlement; greater in fact than the largely 'clean' grain deposits from the Phase 4 corn-drying kiln (see below). Pit 1259 may have been used for storage at some point, but it was subsequently infilled with the burnt rubbish from cereal processing and the remains of fuel such as peat and turf. Grassy and wet meadow indicator weeds in the burnt deposits may represent the remains of peaty or grassy turf cut for fuel. Other indicator weeds were suggestive of cereal crop processing activities occurring at the site. These features provide an interesting comparison with the remains recovered from the later corn-drying kiln, as from the drier alone one could suggest the grain was imported, or at least, processed elsewhere. The burnt refuse from the earlier phase suggests that the grain was processed and probably also grown local to the settlement.

The Phase 4 Roman corn-drying kiln produced the most abundant quantities of carbonised remains. The predominant cereal type recovered from the site was bread/spelt wheat, with lesser amounts of barley and oats. This is concurrent with recovery from other Romano-British dated sites in England (e.g. Greig 1991). Bread/spelt wheat type cereal chaff was recovered in small amounts, with some grain still attached to the glumes. This is similar to van der Veen's (1989, 304) description of grain stored as semi-clean spikelets rather than clean grain in areas with wet summers, as the glumes help to prevent spoilage. This species was probably grown primarily for human consumption, but oats and perhaps barley were possibly grown for animal fodder. The primary use of the kiln was probably for drying of cereal grains prior to storage and consumption. Grains such as barley may also have been roasted for use in beer making, although no germinated grains were recovered.

Despite the small quantity, the discovery of three barley grains in the fill of the Phase 3 burial (1223) is noteworthy and possibly representative of a votive offering.

### Conclusion

Only broad conclusions may be drawn from this analysis. The numbers of grain recovered from the earliest phase were too low and little may be gleaned, other than to state that bread/spelt wheat and barley were present around the settlement at this time. From Phase 2 onwards, into the Roman period, we might envisage an intensification in agricultural practices with the necessity to produce a large crop yield of wheat indicated by the abundance of carbonised cereal grain and weeds of cultivation recovered over this period. The need to produce fodder is suggested by the recovery of large numbers of oats and the presence of grassy meadow/pasture indicator weeds, which could be indicative of hay. Weeds of grassy and wet meadows may also indicate agricultural expansion onto poorer soils, particularly for cultivation of oat crops.

### RADIOCARBON DATING

Three samples of bone were submitted for radiocarbon dating at the Scottish Universities Research and Reactor Centre. The samples were submitted in order to try and improve upon the dating resolution provided by the pottery and to provide additional evidence to support the spatial evidence suggesting that the infant inhumations were contemporary with the settlement. The achieved date ranges are rather too broad for precise interpretation, such is the nature of the calibration curve for this period. The results are presented in Table 11 below.

### DISCUSSION

#### Dating and Phasing (Fig. 28)

The earliest activity on the Bempton Lane site is represented by a lithic assemblage that dates predominantly to the Neolithic period. The vast majority of the flint was



Lab. Code	Context	Phase	Material	Radiocarbon Age BP	Cal. Age d1 (68%)	Cal.Age d2 (95%)	Delta <sup>13</sup> C rel. PDB (‰)
GU-11137	130	3	Human bone	1865±70	70-240 AD	1-340 AD	-19.9
GU-11138	1278	3	Large animal bone	1850±40	120-230 AD	70-260 AD	-24.0
GU-11139	1004	2	Cattle bone	1735±55	240-390 AD	130-430 AD	-22.5

Table 11. Radiocarbon dating results

recovered as residual material from the fills of the features and ditches that form the four identified phases proper of Iron Age and Romano-British settlement. The possible exception is the material recovered from the stratified deposit 1674 at the entrance of Structure 14 (Phase 1, see Fig. 6). This deposit may have been fortuitously preserved by the 'cobbled' entranceway and possibly the remnant of more extensive deposits associated with the Neolithic settlement at Sewerby Cottage Farm nearby (Fenton-Thomas 2009).

It is not easy to reconcile the dating evidence for the four phases of the settlement complex, due partly to poor chronological distinction of the native handmade pottery fabrics and the imprecise dating of other recovered artefacts (e.g. querns). The broad date ranges achieved for the radiocarbon determinations compound the problem. The phases are essentially determined by stratigraphic relationships, but these are supported only in the broadest terms by the combined dating evidence. Over 80% of the pottery from the site is of native handmade fabrics that can only be broadly dated to the 1st century BC to the 3rd century AD, though some better resolution is to be had from the smaller assemblage of Roman material, which occurs in all phases but only in significant amounts in Phase 4. Irrespective of the possible ways in which apparently later material may have found its way into early features (see p. 89), the presence of Roman material in all phases would seem to confine the life span of the site to a c. 200 year period between the mid-1st century and the mid-3rd century AD and is broadly in keeping with the radiocarbon determinations. Such overall parameters are of little assistance in determining the dates of the various phases. There is little difference in the dating of the Roman pottery from any of the phases, although on balance the material from Phase 2 would appear to favour an early 2nd-century date. Thus for early 2nd-century material to find its way into still open Phase 1 features, it is more likely that Phase 1 is late 1st century/early 2nd century, rather than pre-Roman Iron Age, though of course the features designated Phase 1 may represent more than one phase of activity. Some further resolution for Phase 3 is provided by the Roman coin which, although minted in the early 2nd century, is considered to have been in circulation for up to a century, suggesting it was deposited late 2nd/early 3rd century. Given however that the site is not perceived to have continued beyond the mid-3rd century it would appear more likely that Phase 3 dates to the late 2nd to early 3rd century AD and Phase 4 the early to mid-3rd century AD.

## The Settlement and Field System

### Phase 1: The Unenclosed Settlement (Figs. 4 and 28)

This earliest phase is represented by at least eight structures of various circular and sub-rectangular form which, along with a number of other features, do not, on the basis of the available evidence, appear to have been enclosed. Undefended open settlements are more typical of the earlier Iron Age in East Yorkshire and this apparent example at Bempton Lane is rather unusual for the 1st century AD (see p. 49). Nevertheless, there are examples of later Iron Age sites where the settlement could have been at least partly open, such as North Cave (Dent 1989), Creyke Beck, Cottingham (Evans and Steadman 2001) and Salhouse Road, Hull (Evans 2000), though only the latter, the undefended nature of which is perhaps most debatable, has been dated as late as the 1st century AD.

The range of structures attributed to this phase is notable, although most find parallels with those found at other later Iron Age and Romano-British sites in the region. As a conventional roundhouse of about 10 m diameter Structure 14 finds the most parallels, for example in Creyke Beck structure K (Evans and Steadman 2001, fig. 1), North Cave structure 1 (Dent 1989) and Bursea Grange (Halkon and Millett 1999, 68). The open-sided form of Structure 1 is less common, although Iron Age parallels can be found at Creyke Beck (Evans and Steadman 2001, fig. 1, structure D) and Shiptonthorpe (Millett 2006, fig. 4.13, structure 3.1). Both these examples however had evidence for an internal post-ring, a feature lacking at Bempton Lane.

Whilst there is undoubtedly considerable diversity in the plans of ancillary rural structures found in the region (Taylor 2001, 50-52), the circumstances and range of the smaller structures attributed to Phase 1 are not readily comparable. The two sub-circular structures (Structures 29 and 30) do find parallels at other sites, albeit at the small end of the range of known sizes. The small sub-rectangular structures (Structures 8, 10, 11 and 31), however, are less easy to reconcile with an open settlement on the basis of what is presently known. A small rectangular post-hole structure at Bursea Grange has been viewed as a likely animal stockade (Halkon and Millett 1999, 69), whilst small ditched rectangular enclosures interpreted as either stock enclosures or stock buildings constructed on sleeper beams (e.g. Morris 1979, fig. 42; Hingley 1989, 73). Examples are known from Hibaldstow, North Lincolnshire (Smith 1987), Whin Fields, Langton (Ramm 1978, fig. 25) and Stamford Bridge (Evans and Steadman 2001, 94), but these occur within the context of Romano-British enclosed or roadside settlements. In the cases of Structures 11 and 31, which have a truer rectangular plan and are aligned geometrically with the later enclosures, and are not cut by Phase 2 features, it is conceivable that these are later structures perhaps belonging to Phase 2 or 3. This notion may also be entertained within the trend of round to rectangular houses, but this chronological transition was not straightforward (Hingley 1989, 31; 1991, 76; Taylor 2001, 50-2) and should not be overly relied upon in determining phase. Notably, Structure 19, another seemingly rectangular structure, is cut by a Phase 2 ditch.

The function of feature 1069 remains in some doubt. In plan the feature is very



reminiscent of oven plans of Iron Age and Romano-British date found at Dragonby, North Lincolnshire (May 1996, 97, fig. 5.34), but whereas these examples had clear proof of burning in the flues, the Bempton Lane example had no such evidence, nor was there anything in its fill that would suggest use as a crop drier. In conclusion the feature is viewed as an oven or crop drier that was never put to its intended purpose and was subsequently infilled.

#### Phase 2: Settlement Enclosure and Field System (Figs 10 and 28)

Rectilinear enclosures with single central roundhouses, as represented by the Enclosure A and Structure 17, are very common in East Yorkshire and the north-east of England generally (e.g. Taylor 1999, 33; Cunliffe 2005, 318). They are commonly dated to the Late Iron Age/early Roman period and are usually interpreted as native, single nuclear family farmsteads, although more often interpretation is intuitive on the basis of morphological analysis of crop marks (e.g. Stoertz 1997, 49-51). At 14 m the diameter of the Structure 17 roundhouse makes it one of the larger examples in the region.



Fig. 27 Location map showing sites referenced in the discussion

The large amounts of pottery and animal bone recovered from the Structure 17 gully, and indeed the Enclosure A ditch, suggest a domestic use. Two large pits just off-centre within the structure interior are too shallow to have supported uprights. They may however have housed stone bases upon which timber uprights could have rested, reminiscent of the arrangement for the four stone bases that supported the roof of the 2nd-century stone roundhouse at Winterton, North Lincolnshire (Todd 1973, 84-6, fig. 19), although how this arrangement might have worked is unclear. A domestic function for the enclosure is further indicated by the animal bone filled pits in the northern part of the enclosure. The contents of pits 1153 and 1259 in particular are indicative of feasting, whilst the content of pit 1735 is consistent with bone working, two aspects that might be viewed as criteria for a settlement of some status in the absence of Roman material goods in any quantity (see Hingley 1989, 159).

The relative lack of features and finds from Enclosures B-E suggests that they were used for agricultural purposes, probably for corralling animals close to the settlement enclosure. Whether this arrangement should be termed an aggregated nucleated farm or part of an expanding ladder settlement is difficult to say without a wider perspective on the nature of the land allotment at Bempton Lane. Certainly, the investigations in the northern part of the Sewerby Cottage Farm site hint at a field system on the same alignment 400m to the east (Fenton-Thomas 2009, fig. 159).

### Phase 3: The Reorganised Settlement and Field System (Figs 14 and 28)

Whether or not there was any hiatus in the use of the Bempton Lane site is unclear. The enclosures in the northern part of the site seem to have gone out of use, but continuity seems to be implied by the continued use of the main enclosure. The ditches for the new Enclosure F did cut through Enclosure A ditches that had been largely infilled. This suggests that although the complex received a radical reorganisation and reorientation, the fact that the main enclosure remained on the same plan, and as a focus of activities, is indicative of continuity of use, if not function.

The simple partition of Enclosure F is a feature seen at other Romano-British enclosures, such as at Langton (Ramm 1978, fig. 25) and possibly Brantingham (Dent 1989, 27), whilst others are seemingly reflected in the crop mark record (Stoertz 1997). The purpose would logically be to facilitate a dual function, which is perhaps why structures are only evident in the eastern half of the partitioned enclosure at Whin Fields, Langton. At Bempton Lane there is no obvious evidence for domestic activity, although the northern half of the Phase 3 enclosure contains a concentration of unphased post-holes that might represent a timber structure. Moreover, ditches defining the rectangular sub-enclosure in the north-eastern quarter of the enclosure and the adjacent stretches of the main enclosure ditch have produced significant quantities of artefacts which would suggest that this area was a focus for domestic activity. A corner sub-enclosure of similar date at Dunstan's Clump, Nottinghamshire was found to contain a timber building (Garton 1987, fig. 6), whilst small rectangular enclosures, such as at Gibraltar Farm, Kingswood (Evans and Steadman 2001, 86) have been considered as defining possible rectangular structures. No features, however, are consistent with an east-west structure orientated within the Bempton



Lane example. Rather, here, activity (at one phase at least) may revolve around an enigmatic and poorly defined sub-rectangular feature (1570). This potentially appeared as part of a broad gully containing what the excavator interpreted as the remnant of a chalk rubble foundation. This would equate to a structure with internal dimensions of the order of perhaps only 3 m by 2 m, which is small for a free-standing domestic structure and rather lacking in parallels. The recovery of a door pivot stone from the trial trench that inadvertently cut through this feature is also suggestive of a structure at this location.

Whether the group of five infant burials are contemporary with the possible structure represented by feature 1570 is difficult to determine from the available evidence, but all seem to lie within the sub-enclosure area and are exclusive to the area occupied by feature 1570. Infant burials are common on Romano-British rural settlement sites in East Yorkshire: similar findings have been made for example at Caythorpe near Rudston (Abramson 1996, 71), Swaythorpe Farm, Kilham (Mackey 2001, 39) and Burnby Lane, Hayton (Evans and Steadman 2001, 82). An infant burial at Tuft Hill, Burton Agnes was found interred with pottery and a number of artefacts (Rigby 2004, 144-5), but whether the finds found in association with the Bempton Lane infant burials should be regarded as grave goods is debatable. The coin found with 1223 is perhaps an obvious exception, especially in the light of the two Roman coins found with a child burial at Wattle Syke, Boston Spa recently. Otherwise, three of the burials contained pottery (111, 1263 and 1341) and three contained animal bones (131, 1223, and 1621 in southern half of Enclosure F). Of possible significance is the fact that all three of the latter contained a single sheep tooth, in two instances accompanied only by a mammal long bone, the exception being 1223 which, along with the coin, contained eight unidentified animal bone fragments.

Infant burials have been found in association with adult burials within Late Iron Age/Romano-British settlements at Dragonby, North Lincolnshire (May 1996, 122-4) and at Dalton Parlours, West Yorkshire (Wrathmell and Nicholson 1990, 171-4). Where and how the Bempton Lane adults were disposed of is unknown, but it is notable that a number of later Romano-British cremations were located at Sewerby Cottage Farm immediately to the south-east (Fenton-Thomas 2009, 251).

The sixth infant burial (1621) was located in the centre of the southern half of the partitioned Phase 3 enclosure, where the main feature, a post-hole structure (Structure 16) occupied the eastern half of the area (pre-supposing that the un-phased roundhouse in the western part of this area, 1645, was either a Phase 1 or 2 feature). The rectilinear post-hole array does not translate into the traditional four-post granaries seen on many native sites, but could conceivably represent two simple east-west c. 7 m by 3 m rectangular post buildings similar to those open-sided structures found at Dragonby, North Lincolnshire (May 1996, structures 7 and 9) and Dalton Parlours, West Yorkshire (Wrathmell and Nicholson 1990, 73). They certainly do not bear comparison with the large aisled post-hole barns found at Brantingham (Dent 1989, 26) and Welton Wold (Mackey 1999, fig. 3) for the same period. However, the better symmetry would have this building as a 12-post 7 m by 7 m square structure. As such it finds parallels with raised granaries of the 'military' type,

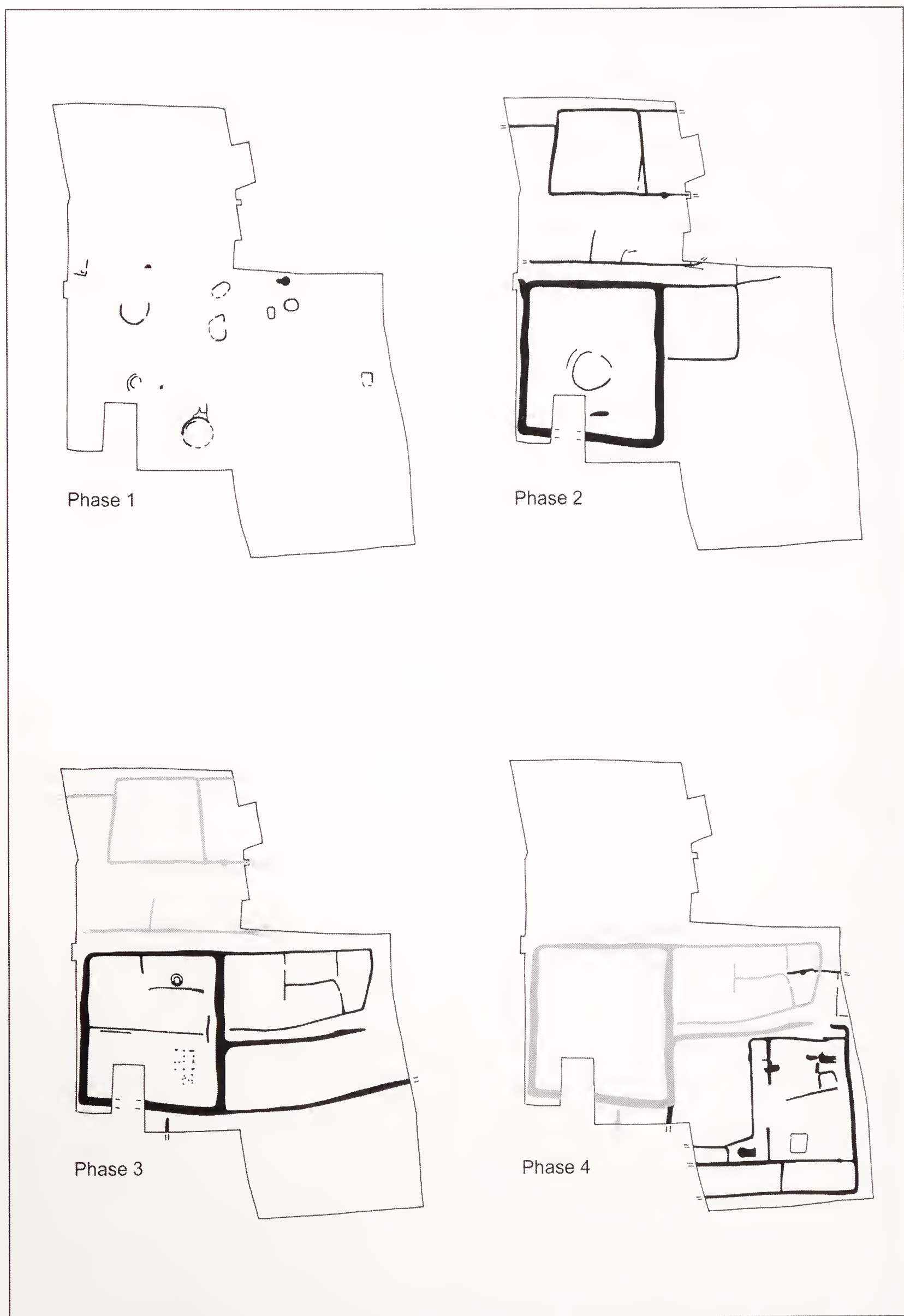


Fig. 28 Phased development of the site



described by Morris (1979, 32, fig. 29b), though these are not generally prevalent on rural sites in the region. Further options for the Bempton Lane structure are provided by a group of post-holes on the same general alignment to the south, which may represent a smaller separate or adjoining structure.

The internal titulum-styled entrance arrangement at the eastern side of the main enclosure, which possibly reflects the earlier (?bridged) entrance location, was seemingly designed to filter traffic into the two halves of the enclosure from the perceived trackway that ran between Enclosures G and H. Enclosure G seems to have been subdivided into several smaller units, whilst Enclosure H, to the south, would appear to have formed one large rectangular field. The development of the enclosure and field system towards the lower valley area to east (Enclosures G and H) might signify some association with the 1st to 3rd-century activities taking place at Sewerby Cottage Farm. There is certainly no obvious settlement area at Bempton Lane, although equally the buildings found at the Sewerby Cottage Farm site are not thought to be domestic dwellings either (Fenton-Thomas 2009, 247).

#### Phase 4: The New Enclosure (J) (Figs 17 and 28)

The final major phase of activity relates to the creation of a large enclosure (J) in the south-eastern part of the site. With respect to the Phase 3 regime, this new enclosure appears to have articulated with Enclosure F, respected Enclosure G and cut the ditch of Enclosure H, suggesting that Enclosure J was an expansion of the former complex, perhaps involving a switch of focus, rather than a replacement for it. In the first instance the new development seems to have comprised a large rectangular enclosure, but this subsequently shrank to the reverse L-shaped enclosure that received considerable subdivision. Effectively, the loss of the original northern side of the enclosure created a funnel-shaped access to a new smaller residual enclosure formed in the angle of the 'L'.

The apparent complexity and subdivision of the site enclosures (J and G) is common on later rectilinear Romano-British sites. Stoertz has seen this trend as reflecting a degree of Roman influence on crop mark sites where little other change is apparent (Stoertz 1997, 67, fig. 28). Villas apart, excavated parallels may be found for this subdivision and compartmentalisation in the later Romano-British sites such as Sandtoft (Samuels and Buckland 1978) and, perhaps more chronologically compatible, at Gibraltar Farm, Kingswood, which like Bempton Lane also saw a reorganisation in the early 3rd century (Evans 2001, 85-8).

The subdivided Enclosure J, and the further divided and extended Enclosure G, occupy the least understood area of the site. Whilst, however, there was no evidence for structures occupying the smaller sub-enclosures, that they may have been utilised for specific discrete agricultural activities is indicated by the large and unusual corn drier in sub-enclosure J2. The larger sub-enclosure (J6) might be regarded as the principal enclave, given that it contained a rectangular structure and a number of other uninvestigated features. The structure is again typical in shape and size of other supposed agricultural buildings or animal folds found in the region for this period and there is little reason to see it as a domestic habitation.

### Settlement Economy

Small assemblage sizes and relatively poor organic preservation leave the validity of assessing the social and economic status of the settlement at different times rather questionable and only relevant in terms of identifying broad trends. Whilst there is a very small trend towards a decline in sheep and an increase in cattle over time, this is not marked and there is no firm evidence in Phases 1 and 2 for a sheep dominated economy that is typical in the evidence from many pre-Roman native sites in the Wolds. Richardson (pp. 118) has argued that the animal bone ratios from the early phases could suggest greater Roman influence (albeit probably indirect) than might be expected from the site's location, as also borne out by the early presence of Roman pottery (p. 87).

The animal bone data for the first two phases, especially Phase 2, indicate sheep and cattle herds being raised for dairying and fleeces, which tallies with the small amount of botanical evidence for rough grazing and meadows situated nearby. There is little evidence at this time for animals being raised for their meat, although there is evidence for sheep and pigs being butchered for domestic feasting and perhaps bone working in Phase 2. Pig is present in Phase 2, but numbers only increase at the expense of sheep in Phase 3. This trend may be associated with the reorganisation of the settlement in Phases 3 and 4, a development that could have seen a greater onus placed upon arable cultivation. Alldritt (p. 122) suggests that arable intensification towards producing large crops may have begun in Phase 2, but the presence of a single four-post (?granary) structure in Enclosure B barely supports this. The combined evidence of the querns, what is probably a large granary (Structure 16) and at least one crop drier, provide more convincing evidence for a site geared to arable cultivation in Phases 3 and 4. The evidence from the crop drier reveals the processing of bread spelt wheat and lesser quantities of barley and oats, all quite typical for a 2nd to 3rd-century Romano-British site in the north (van der Veen 1992, 154, 159).

Small quantities of metalworking waste were found in deposits associated with Phases 1-3, but insufficient excavation makes it difficult to draw any useful conclusions about the absence of any such findings from Phase 4 deposits. Evidence for small-scale metalworking is quite common on native sites and it is notable that in all cases samples suggest coal was the fuel used in this work (pp. 108), although plant remains from Phase 2 also suggest peat was in use as a fuel (pp. 120-21).

### CONCLUSIONS

The excavations have investigated a site of later Iron Age and Roman period date that has broadly been resolved into four phases of development. These date approximately to between the mid-1st and mid 3rd centuries AD, with activity of much earlier Neolithic and Bronze Age activity being represented by a residual flint assemblage. The earliest later Iron Age activity (Phase 1) was represented by a diverse range of apparently unenclosed structures and features, which were replaced by a rectilinear enclosure complex focused upon a principal enclosure containing a central roundhouse (Phase 2). Subsequent reorganisation saw an eastward



reorientation and expansion of the enclosure complex (Phases 3 and 4), a development which might have corresponded with a change in the economic basis of the settlement towards greater arable production.

In very general terms the evidence is indicative of a site with a mixed farming subsistence economy with an onus on pastoralism during the late 1st and early 2nd centuries AD. The 2nd century AD saw a trend towards greater arable farming, with this becoming perhaps the dominant element in the site's economy by the time it went out of use in the 3rd century AD. Whether the site should not be considered Romanised by the time of its demise is debatable. Although through time there are few signs of increased prosperity, there was certainly an increase in the adoption of Roman material culture (in the form of pottery), to which the introduction of rectangular structures, subdivided enclosures and the apparent increase in cereal production are added indicators of a greater integration into the regional economy. The fact that the site seems, like many others, to have been abandoned by the mid-3rd century AD, suggests that it remained essentially native and could have been subsumed by one of the truly Romanised large estates that emerged in the 3rd century AD.

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## A ROMANO-BRITISH SETTLEMENT AT MILLFIELD FARM, WHELDRAKE, NEAR YORK

*By* Gavin Robinson

with contributions by John Carrott, Jane Cowgill,  
Brenda Dickinson, Peter Didsbury, Allan Hall, Kay Hartley,  
Joanna Higgins, Alan Hogg, Deborah Jaques, J Tibbles,  
Philippa Walton, Jon Watt, David Williams and Elizabeth Wright

*A previously unknown Romano-British settlement was discovered during the summer of 2002 close to Millfield Farm, Wheldrake, to the south-east of York (SE 668 443) during construction of the Yorkshire Derwent Aqueduct water pipeline between Elvington and Riccall.*

Although the site was heavily truncated, five broad phases of activity have been identified based on stratigraphic analysis of excavated features and assessment of datable finds.

The evidence suggested a small settlement existing on high ground that dominated a largely flat landscape.

The earliest phase of activity comprised two inter-cut roundhouse ring gullies. These were superseded by a sequence of short linear gullies that may have been part of rectangular timber structures within a ditched enclosure. The settlement during Phase II included at least two enclosures and a small cemetery and possibly a trackway. During Phase III the settlement expanded along the trackway. The full extent of the Romano-British phases of settlement is still unknown although the main focus of activity was probably located on the summit of the ridge, immediately to the south-east of the excavation. The pottery broadly dated to the third and fourth century with some possibly from the late second century.

The Romano-British period features were truncated by medieval plough furrows. A post-medieval field boundary and a shallow scoop that cut the furrows comprised the final phase of activity.

### INTRODUCTION

Northern Archaeological Associates were commissioned by Scott Wilson on behalf of Yorkshire Water Services Ltd to undertake an archaeological scheme of works during construction of a water main duplication between Elvington and Riccall to the south-east of York. The work was undertaken over a twelve week period between April and July 2002.

An archaeological appraisal (NAA 2001) of the proposed pipeline route which identified twenty-six archaeological sites within 250 m of the pipeline. Based on the results of the assessment a programme of field survey (fieldwalking and geophysical

survey) was carried out (NAA 2002) followed by archaeological monitoring of areas of high archaeological potential together with archaeological inspection of the entire pipeline route. During this monitoring archaeological features were identified near Millfield Farm.

The site lay 10 km to the south-east of York, some 750 m to the south-west of Wheldrake (SE 668 443), immediately to the north of the road (Wheldrake Lane) between Wheldrake and Escrick (Fig. 1). The features extended for a length of 75 m along the pipeline corridor where the route turned to the south and crossed Wheldrake Lane and consisted of a trackway, enclosure ditches, burials and an area of settlement activity (Fig. 2). The site was located on a low ridge some 16 m OD in height running from north-east to south-west between the villages of Wheldrake and Escrick (NAA 2001). To the north-west and south-east of the ridge the land was generally flat at approximately 7m OD. The ridge was composed of an underlying geology of river terrace drift overlain by soils from the Bishampton 1 series. Either side of the ridge, glaciolacustrine clay overlain by soils of the Foggathorpe 2 association formed the flat and seasonally waterlogged surrounding landscape.

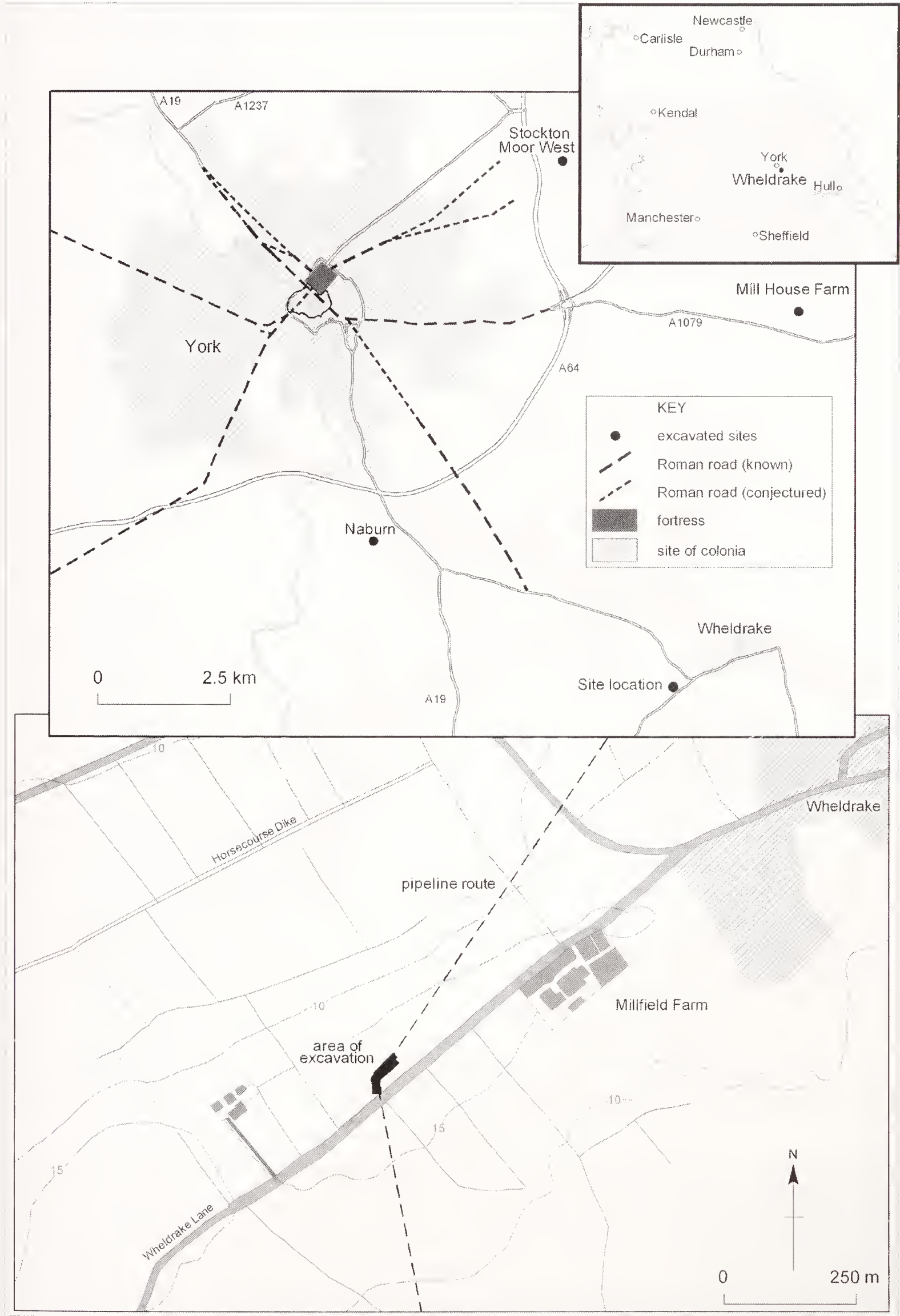
Prior to the identification of the site no archaeological sites or artefacts had previously been identified in the immediate vicinity of the site (*ibid.*). Sample geophysical survey undertaken some 700 m to the north-east of the site as part of the evaluation of the pipeline route only recorded anomalies resulting from former ridge and furrow ploughing. The nearest known Romano-British site, a ladder-settlement at Sutton Hall some 4 km to the east (SE 708 448), was identified as part of the Vale of York Wetlands Survey in 1997-8. Fieldwalking and geophysical survey showed that this site, which was located on higher ground overlooking an old course of the River Derwent, extended for more than 350 m from east to west with enclosures flanking a linear trackway. Trial trenching produced an assemblage of pottery which suggested that the period of activity extended from the mid third to later fourth centuries, whilst a gold earring suggested that the site was of relatively high status (Chapman *et al* 1999, 174-88). A Romano-British settlement has been identified on higher ground overlooking the Derwent at Kexby (SE 690 513) to the north of Wheldrake and there is some evidence for another within Hemingbrough to the south overlooking an old channel of the Ouse (SE 674 306) (Pearson 1997; Eagles 1979, 436).

At Millfield Farm, after the initial discovery of the site an adjacent area was re-cleaned by machine, with this area being further extended upon the identification of burials to reveal the full extent of the archaeological features. Part of the pipeline corridor immediately to the south of Wheldrake Lane was also re-cleaned by machine, but no archaeological features were identified extending into this area.

## RESULTS OF EXCAVATION (Figs. 2-6)

The area of excavation was dictated by the route of the pipeline and formed a narrow strip across the Romano-British settlement. Because of the heavy truncation and limited area of excavation detailed phasing of the site was not possible. However, five broad phases of activity have been identified based on stratigraphic analysis of excavated features and assessment of datable finds, the allocation of which is still





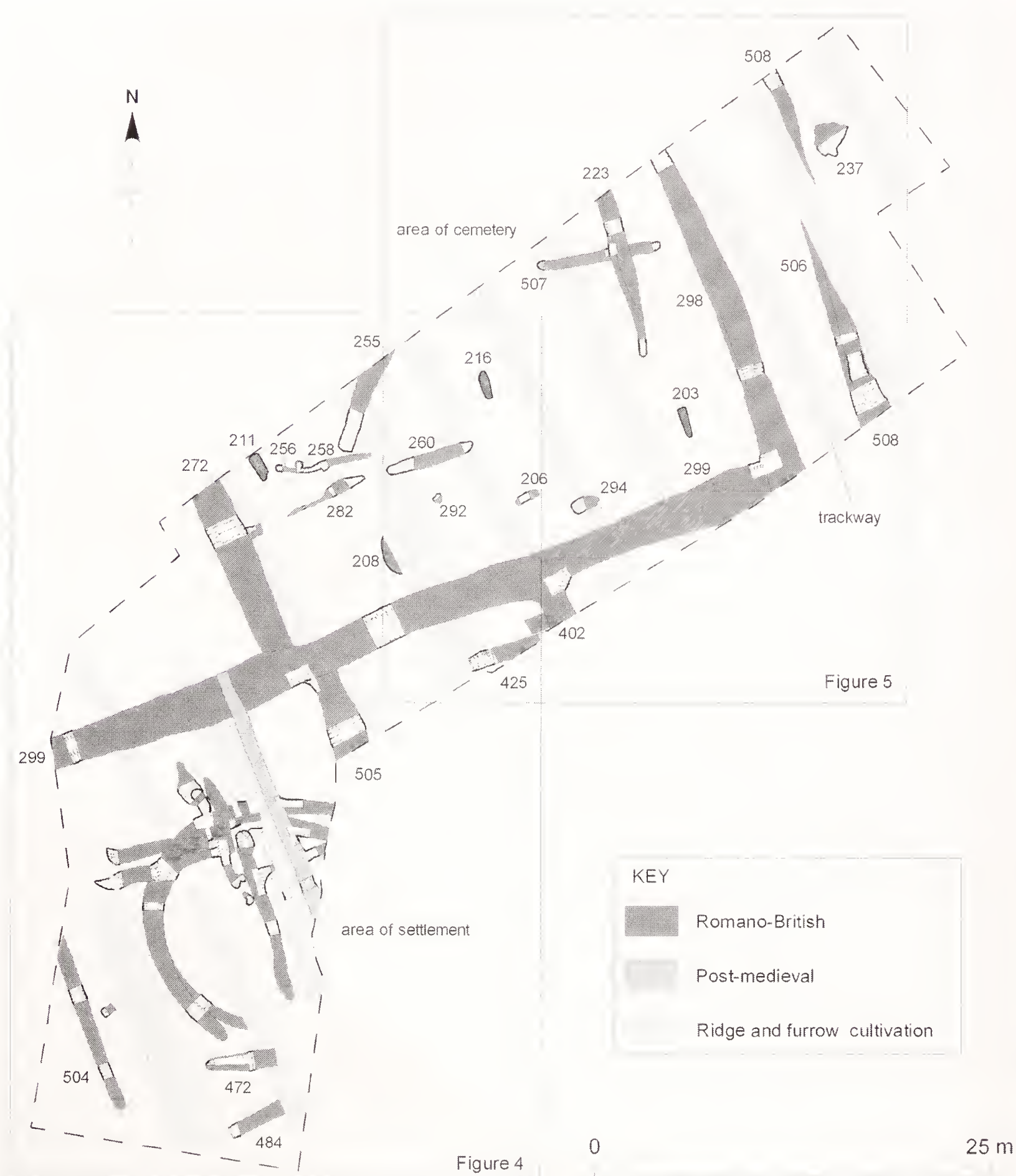


Fig 2. Millfield Farm: site plan

tentative (Fig. 3). The first phase of activity was identified as the inter-cutting ring gullies in the south-west corner of the site which was probably abandoned sometime before the third century AD. The second phase pre-dated the late third century and may have comprised a trackway on the eastern edge of the site, ditches that enclosed a cemetery and a series of short straight gullies that replaced the ring gullies. This was replaced by the third phase dating from the late third to fourth century. Activity within this phase consisted of a re-ordering of the Phase II enclosures, continuing use of the trackway and a change in function for the area of the graves. These Romano-





Phase I (in black)



Phase II (in black)



Phase III (in black)



Phase IV (ridge and furrow)

British phases were truncated by a fourth phase consisting of medieval plough furrows, which may date to the twelfth century. The fifth and final phase comprised a post-medieval boundary ditch.

#### Phase I (late Iron Age/early Romano-British)

In the south-western area of the excavation, the remains of two ring gullies (Fig. 4) were recorded each enclosing an area approximately 11 m in diameter. Ring gully 509 was the earliest and was later repositioned as gully 443. Both cuts measured 0.35-0.4 m deep by approximately 0.55-0.6 m wide (Fig. 6, sections 1 and 2) and were filled with mid greyish brown silty clay, but in the north-eastern sections of the features the deposits within them were notably darker and browner. A single sherd of undiagnostic Roman greyware was recovered from ring gully 443. These two features may relate to the construction then rebuilding of a roundhouse representing initial settlement activity on the site. No closely datable artefacts were recovered from these features, but they had been abandoned before the linear gullies in Phase II were cut, dating this phase to sometime before the late second or third century.

There may have been an earlier version of the Phase III trackway (see below) contemporary with the ring gullies.

#### Phase II (pre late third century)

In the south-west part of the site Phase I ring gullies 509 and 443 were superseded by a series of short linear gullies. These features were aligned approximately north-east to south-west or north-west to south-east in an alternating pattern and did not drain into any other features. They could have related to structural features such as fence lines or rectangular buildings that replaced the previous roundhouses. However the latter theory is dependent on the evidence of the other three walls of each proposed building consisted of shallow beam slots or postholes that have not survived later truncation of the land surface. All of these gullies inter-cut and, based on the stratigraphic relationships, a sequence could be identified.

In chronological order the features associated with this phase comprised a shallow north-east to south-west aligned gully (500) followed by an irregular north-west to south-east gully (499) that was cut by an east to west linear feature (502) followed by a north-west to south-east gully (495). Ditch 500 was 0.7 m wide, 0.25 m deep and was filled with mid orange-brown silty clay. Ditch 499 measured 0.6 m wide by 0.2 m deep and three fragments of nail were found within its dark brown-grey silty clay fill. Feature 502 (Fig. 6, section 3) measured 0.8 m wide by 0.4 m deep. Its dark grey silty clay fill contained two fragments of iron nail and fragments of pottery including sherds of imported amphora in use from the conquest period up until the mid third century AD and a Gaulish bowl from the late second or first half of the third century. Ditch 495 (Fig. 6, section 4) was 1.15 m wide, 0.3 m deep and filled with mid grey brown silty clay. Within this fill, pottery fragments from the late third or early fourth century AD Holme-upon-Spalding-Moor and Crambeck industries were found along with a piece of a necked shouldered bowl of uncertain date (Fig. 7, no. 1), and also a fragment of imbrex roof tile and two fragments of iron nails.

Three pits were recorded in the south-west area of the site; pit 429 cut ditch 495,



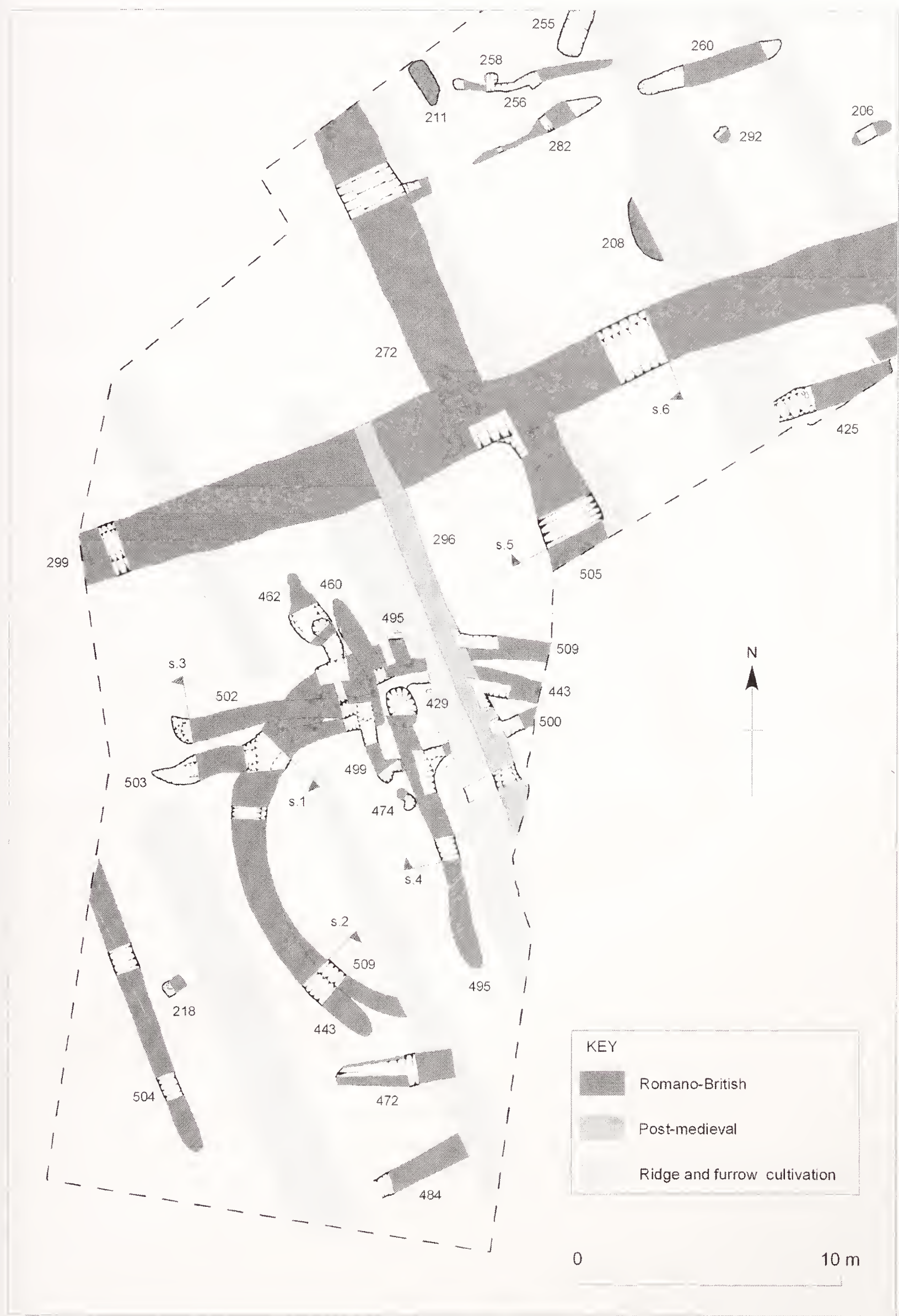


Fig 4. Millfield Farm: detail plan of south-west corner of site



pit 462 cut ditch 462 and in turn was cut by pit 460. Pit 429 measured 1.6 m by 1.1 m and 0.24 m deep and was filled with mid grey brown silty clay containing pottery dated to the third century AD and single fragment of *imbrex*. Pit 462 measured 1.9 m by 1.2 m and 0.45 m deep and cut into its fill was pit 460 which measured 0.8 m by 0.6 m and 0.44 m deep and was completely filled with large angular stones.

A north-west to south-east aligned boundary ditch (505, Fig. 6, section 5) was placed within Phase II based on the pottery found within its fill and the fact that it was cut by the Phase III ditch 299 (see below). Furthermore, the ring gullies of Phase I would have intersected with ditch 505 making it unlikely that they were contemporary. Ditch 505 measured 2 m wide by 0.6 m deep and was filled with mid brown-grey clayey silt. A single piece of *tegula*, a fragment of nail and pottery dating from the late second century to after AD 280 were found within the ditch fill.

To the north-west of ditch 505 was another north-west to south-east aligned boundary ditch (272), which measured 1.4 m deep by 0.7 m wide and was filled by mid grey-brown silty clay. It was slightly off-set from ditch 505 some 2 m to the west, which could mean that both these ditches drained into a north-east to south-west aligned ditch that was completely truncated by Phase III ditch 299 (see below). It was noted during excavation of the intersection between ditches 299 and 505 that the western edge of ditch 505 curved as if to turn to the west to join a contemporary north-east to south-west aligned ditch. This theory is further strengthened by the broad chronological range of pottery recovered from the fill of ditch 299 which dated from the late second century to after AD 350. It is therefore possible that this assemblage may include residual pieces from an earlier ditch. This ditch may have extended the full length of ditch 299 to link with an earlier version of the trackway (see below).

A ditch (504) orientated approximately north-west to south-east parallel to ditches 272 and 505 may have formed the western limit of an enclosure containing the structural features of this phase in the south-western corner of the site; equally it may have been an internal division within a much larger enclosure. The ditch measured 0.95 m wide and 0.17 m deep and was filled with mid grey-brown silty clay containing pottery possibly of third century date.

Two graves (203 and 211, Fig. 9) aligned approximately NNW-SSE were recorded in the area east of ditch 272 and north of Phase III ditch 299 (Fig. 5). They were heavily truncated, only surviving to a depth of 0.15-0.2 m and contained poorly preserved skeletal remains. Grave 203 measured 1.4 m by 0.42 m and contained the remains of a young adult about 25 years old but no artefacts. Grave 211 measured 1.8 m by 0.35 m, and contained the skeleton of a middle aged adult and a single sherd of Romano-British pottery. An additional grave-shaped feature (216), also aligned NNW-SSE, was identified within this area of the site. Feature 216 measured 1.9 m by 0.5 m but only survived to a depth of 0.05-0.1 m. Although no human remains were encountered an amber bead (Fig. 8, no. 1) and eighteen sherds of pottery including a rim of a necked jar (Fig. 7, no. 2) of uncertain date were recovered within its fill. These artefacts may have been grave goods, suggesting that this feature was also a grave. An unusual intermediary type of slag was also recovered (see Cowgill below).



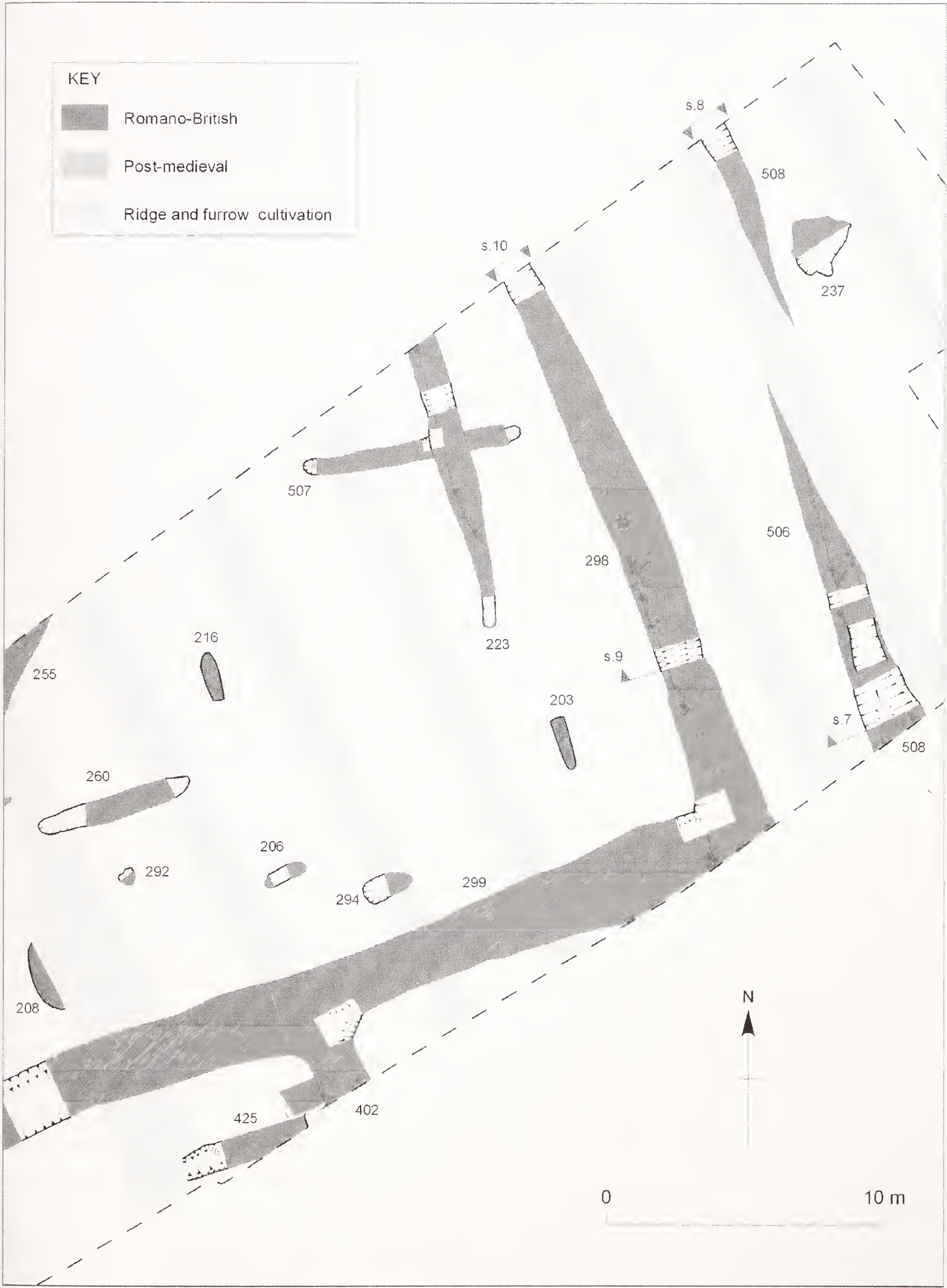


Fig 5. Millfield Farm: detail plan of north-east corner of site

A charred twig found within the fill of 216 gave a radiocarbon date of 60-250 cal. AD (Wk14322,  $1866 \pm 38$  BP) at a probability of 95.4%. Also within this area of the site was an oval shaped pit (208), which measured 2.1 m by 0.8 m and 0.3 m deep and contained leg bones of a cow which may have been articulated at the time of deposition. It has been assumed that these four features (203, 211, 216 and 208) are broadly contemporary due to their similar alignment and spacing. Based on the dating evidence for feature 216 all four features are thought to pre-date the Phase III gullies in the area (see below) and uncertainly attributed to Phase II.

It seems likely that there was an earlier version of the Phase III trackway (see below) contemporary with the features of this phase.

#### Phase III (late third to fourth century)

The major north-east to south-west boundary ditch 299 (Fig. 6, section 6) appears to have been cut during Phase III based on the pottery found within its fill. The ditch was U-shaped in section and generally measured 2.4 m wide by 0.6 m deep with a fill of mid-brownish grey silty clay. Pottery from its fill included a sherd from an Antonine samian jar, a fragment of Gaulish mortarium c. AD 170-200, material from the Crambeck and Holme-upon-Spalding Moor industries and fragments of Dalesware (Fig. 7, no. 3) and Huntcliff jars. The latter pottery form gives a *terminus post quem* for the final infilling of the ditch of around AD 350. Also found within this ditch were a spindle whorl (Fig. 8, no. 2) made from the base of a pedestal bowl of late third or fourth century date, two fragments of *tegulae*, four iron nails, a dog mandible and a fragment of white pipe-clay figurine (Fig. 8, no. 3). A lead object was interpreted as a plug used to anchor an iron fitting, perhaps a hinge or wall hook, into a piece of masonry.

The layout of the settlement changed during Phase III. Although the main north-east to south-west aligned boundary (formed by ditch 299 in this phase) continued in use, ditch 505 was now fully silted up. A north-west to south-east aligned boundary ditch (402) which was cut at the same time as ditch 299 represented a movement (or enlargement) of the Phase II south-western enclosure by some 15 m to the north-east. Boundary ditch 402, which adjoined ditch 299 from the south, measured 1.4 m deep by 0.7 m wide and was filled with dark grey-brown clayey silt.

A north-west to south-east aligned trackway was recorded at the eastern limit of the settlement. There was no surviving surface metalling but the trackway was defined by two ditches (298 and 506) approximately 4 m apart at the southern limit of excavation but diverging to 7 m apart at the northern limit. The eastern ditch (506) was re-cut (ditch 508) but there was no such re-cut visible in the excavated sections of the western trackway ditch (298). Ditch 506 measured 2 m wide and 0.5 m deep at the southern limit of excavation (Fig. 6, section 7) but was completely truncated by the re-cut 508 at the northern limit. Re-cut 508 was 1.2 m wide and 0.25 m deep at the southern limit of excavation (Fig. 6, section 7), narrowing to approximately 1 m wide and 0.3 m deep at the northern limit (Fig. 6, section 8). Ditch 298 measured 1.6 m wide and 0.5 m deep (Fig. 6, section 9) but narrowed to approximately 1.4 m wide and 0.5 m deep at the northern limit of excavation (Fig. 6, section 10). Both trackway





was open until after *c.* AD 280. A corroded scale-tanged knife and an iron nail were also found within the fill of ditch 506. The western trackway ditch (298) contained a range of pottery including fragments of vessels from Crambeck dating to after *c.* AD 280, Holme-upon-Spalding-Moor and two sherds of imported amphorae of mid or late third century AD date. The range of pottery found within the fills of ditches 506 and 298 suggests that they were still silting up sometime after AD 280 and pottery within the fill of the re-cut (508) suggested that it was silting up sometime during the first half of the fourth century. This would place the date for the re-cut of the eastern trackway ditch to somewhere between AD 280 and AD 350.

The fact that the line of the boundary ditch 299 respected the trackway, in as much as it was perpendicular to and terminated within ditch 298, suggested that there may have been an earlier phase of the trackway ditch 298 contemporary with ditch 299. It is reasonable to suggest that a version of the trackway was contemporary with the original phase of settlement, hence it was included within Phase I. However, later re-cutting of the trackway ditches had destroyed any archaeological evidence of this earlier version. The excavated segments did show that the trackway continued to be maintained after ditch 299 had fully silted up.

No settlement features were identified to the east of the trackway indicating that this may have formed an eastern boundary to the settlement. A large irregular feature (237) recorded on the eastern side of the trackway was interpreted as a tree bole and may have been open during Phase III based on the broad chronological range of pottery found within its fill. It measured 2.3 m by some 2 m and was 0.43 m deep. Pottery dated from the second to fourth century AD and an iron looped fitting, possibly from a bucket (Fig. 8, no. 4) were recovered from within its silty sand fill.

A north-east to south-west aligned ditch 425 located at the southern edge of the excavated area was placed within Phase III based on the pottery found within it. It measured 1 m wide and 0.19 m deep and terminated 4.6 m into the area of excavation. The ditch was filled with mid brown-grey clayey silt and contained a number of large stones up to 0.3 m in size. A fragment of a quern stone (Fig. 8, no. 5) was recovered from its fill along with pottery that suggested the ditch remained open after AD 360-70.

A north-east to south-west aligned gully (503) was the last in the sequence of the Phase II features within the south-west area of the site. It measured 0.5 m wide by 0.36 m deep (Fig. 6, sections 1 and 3) and produced pottery dated to the fourth century.

Within the northern enclosed area where the Phase II graves were recorded, several short gullies and a ditch (223, 507, 256, 260, 282 and 255) were excavated. These features were included within Phase III based on pottery dating. It is probable, based on the radiocarbon date obtained from feature 216 that these features post-dated the graves and thus represented a change of activity in this area. Gully 507 was orientated approximately east to west and was cut at right angles by gully 223. Gully 507 was 0.69 m wide by 0.29 m deep and was filled with red-brown silty clay; gully 223 measured up to 1.17 m wide by 0.33 m deep and was filled with orange-brown silty clay. Pottery dated broadly to the third and fourth centuries was recovered from both these gullies and the fill of feature 507 contained two fragments



of box flue tile. It is interesting that these two gullies mirror the pattern observed in the series of inter-cutting gullies in Phase II and therefore may represent an expansion (or a shift) of settlement activity into an area previously used for burial. Ditch 255 was located at the northern limit of this area of the site and measured 1 m wide by 0.4 m deep. Within its fills were a number of sub-angular stones, three fragments of iron nails, a piece of lead melt, three small fragments of daub, fragments of animal bone and eighty-seven sherds of pottery. The pottery included a Dales-type jar (Fig. 7, no. 6) which indicated that the ditch was silting up sometime after AD 280, the other artefacts recovered may relate to the demolition of nearby structures. The short ditch 260 measured 0.95 m wide, 0.2 m deep and 5.5 m long. It was filled with dark brown silty clay containing a range of pottery including a small sherd of an Antonine samian bowl. Features 256 and 282 were heavily truncated and irregular in nature.

#### Unphased Romano-British features

A number of discrete features could not be phased on the basis of either stratigraphic or ceramic evidence. Romano-British pottery was recovered from the majority of these, and the nature of the remaining features suggested that they also belonged to the Romano-British phases of activity.

Within the south-western end of the excavation area were two discrete ditches (472 and 484) and a square posthole 218. Ditch 472 was traceable for a length of 4.5 m and survived up to 0.95 m wide by 0.25 m deep. Ditch 484 was identified for a length of 3.7 m and had a maximum width of 0.75 m by 0.25 m deep.

A number of discrete pits (206, 258, 292 and 294) were recorded within the northern area containing the Phase II graves. Pits 206 and 294 measured 1.75 m by 0.5 m by 0.15 m deep and 2 m by 0.6 m by 0.2 m deep respectively. Both features were aligned approximately north-east to south-west and filled with dark grey silty clay. Although neither contained any finds, their dimensions suggested that they may also have been graves. Features 258 and 292 were heavily truncated and indistinct.

#### Phase IV (12th century)

The penultimate phase of activity on the site related to medieval agricultural activity. It comprised a series of plough furrows spaced approximately 5-7 m apart running roughly north-west to south-east across the excavated area. The furrows were generally 0.8-1.2 m wide and survived to a depth of 0.1-0.2 m. Along with some residual sherds of Roman pottery a single sherd of 12th century AD pottery was recovered from within the furrows. However intrusive sherds of pottery of the same date were found within the fills of features 272 and 298 and with the notable absence of any other medieval pottery it is presumed that these features date to the twelfth century.

#### Phase V (post-medieval)

The latest feature was a north-west to south-east aligned boundary ditch (296) which measured 1.05 m wide by 0.39 m deep. The field boundary cut one of the plough furrows and contained post-medieval pottery and fragments of non-diagnostic ceramic building material.

THE POTTERY

*By* Peter Didsbury with contributions from Brenda Dickinson, Kay Hartley and David Williams

INTRODUCTION AND METHODOLOGY

A total of 934 sherds, weighing 15,685 g and having an average sherd weight (hereafter ASW) of 16.8 g, was recovered during the excavation. The overwhelming majority of this material was of Romano-British date (Table 1).

All the pottery was quantified by the two measures of sherd count and sherd weight, according to ware or fabric type within archaeological context. Identification of form types was made where possible. Data was recorded on an Access database which now forms part of the site archive. The present summary account of the site assemblage is based upon interrogation of this database.

Period	% sherds (n = 934)	% weight (n = 15685g)
Roman	96.3	97.3
Medieval	1.3	1.8
Post-medieval/modern	1.4	0.7
Unattributed	1.1	0.3
TOTALS	100.1	100.1

Table 1. Chronological distribution of the site assemblage

DATING SUMMARY

The chronological implications of individual pottery assemblages have informed the site narrative. It is appropriate to rehearse here the key pieces of evidence.

Phase I

Ring ditch 509 yielded only a single small body sherd of greyware. The sherd is not chronologically diagnostic, but is not within the typical fabric range of the Holme-upon-Spalding-Moor greyware industry (hereafter HOSM), which appears to be the major provider of greywares to the site from about the mid third century onwards. In the disturbed northern section of ring gully 443, two sherds of greyware from segment 427 included one in a gritty fabric within the range of those employed for third or earlier fourth century Dales-type jars.

Phase II

Pottery was recovered from Phase II gullies 495, 499, 501 and 502. Assemblages were small and evidential value limited. In gully 495, possible HOSM and Crambeck products, suggest a later third or fourth century date for segment 464. Segment 414



contains a necked shouldered bowl in a fine light-firing fabric, of uncertain date (Fig. 7, no. 1). In gully 499, segment 449 yielded only a small amount of chronologically undiagnostic greyware. In gully 502, segment 441 yielded only a single body sherd of a Dressel 20 amphora. The form is widely distributed in Britain from the Conquest period up until the mid third century AD. Segment 229 had a small assemblage in its uppermost fill, comprising chronologically undiagnostic greyware, calcareously tempered scrap, and a body sherd from an East Gaulish (Rheinzabern) dish or bowl, dating from the late second or first half of the third century AD.

The assemblage from the fill of pit 460 comprised three undiagnostic scraps of grey and oxidised wares. Gully 499 which was cut by pit 460, yielded only scraps of undiagnostic greyware.

Pit 429 contained seven sherds of pottery, comprising greywares, calcareously tempered ware and colour-coated ware. A greyware dish with externally grooved rim is not closely chronologically diagnostic, the form being available from at least the earlier second century AD. The colour-coated ware consists of two sherds from an indented scale beaker, form KF1 in the York series (Monaghan 1997, 893-894, 995), a type current in the period c. AD 225-280/300. It is possible that the pottery from this feature is all of third century date.

In ditch 505, the earliest chronologically diagnostic material was the rim of an East Gaulish (Rheinzabern) form 31 R, dating to the late second century AD or first half of the third. The only other diagnostic material from the ditch was of a later third or fourth century date. Greywares of HOSM type included a wide-mouthed bowl and the base of a pedestal bowl, cf. forms B2a and B3-5 in the HOSM form series (Creighton 1999, 144-157). The presence of a straight-sided flanged bowl and a wide-mouthed bowl in Crambeck greyware (Corder 1937, Types 1 and 4), show that the ditch remained open for the reception of rubbish after AD 280. Monaghan (1997, 903-905) suggests that, in York itself, Crambeck greyware was available from the beginning of its production period, becoming the dominant greyware by the middle of the fourth century AD. The aggregated pottery assemblage from these ditch segments is of insufficient size or quality to allow refinement of the *terminus post quem* afforded by this product.

Ditch 272, which was parallel but off-set to ditch 505, yielded a small assemblage of worn greywares and shell-tempered scrap. The latest material was the rim of a twelfth century jar in a white-firing North Yorkshire fabric in the Pimply Ware tradition (compare segment 226, ditch 298, below).

No pottery was found in Grave 203, and two fragments of greyware from Grave 211 were of uncertain date. Grave 216 contained eighteen sherds of coarse greyware, including the rim of a necked jar (Fig. 7, no. 2). The form is not closely datable, but the gritty fabric is distinctive, and very similar to the kinds of fabrics used for some Dales-type jars produced in East Yorkshire in the third and possibly earlier fourth century.

A coarse gritty greyware fabric of the type employed for Dales type jars occurred in ditch 504, and might indicate a third or earlier fourth century *terminus post quem* for the fill of this feature.



### Phase III

Pottery was recovered from the fills of several segments of boundary ditch 299. This extensive feature was cut in Phase III and may have completely removed any archaeological trace of an earlier Phase II ditch on the same alignment. Therefore the fill of ditch 299 contained material from Phases II and III. The earliest chronologically diagnostic material is a sherd from an Antonine samian jar, probably with *en barbotine* decoration and probably Central Gaulish (segment 263). Also relatively early (segment 470) is a wide-mouthed greyware bowl of a type present in the later second to earlier third century at Dragonby; (Gregory 1996, fig. 20.15, no. 1067). Segment 407 eloquently illustrates the chronological range of material in these ditch segments. Early material is represented by a white pipe-clay figurine fragment which may be of Trajanic-Antonine date (Fig. 8, no. 3, see Walton, this report) and by the collar of a Central Gaulish form 45 mortarium, *c.* AD 170-200; later material included HOSM and Crambeck components, the latter including a fourth century AD Type 6 mortarium. Ditch 299 also contains Dalesware jars (ditch segments 263 and 400) and distinctively grooved sherds which are almost certainly from the upper bodies of Huntcliff jars (ditch segment 214). In the City of York, Dalesware in fourth century deposits is thought to be almost entirely residual (Monaghan 1997, 898). This may not, however, be the case in the East Riding as a whole, and it may be safer in this case to continue to date these jars to the third century AD or the first half of the fourth. Huntcliff is now thought to have been in production from the mid 350s AD (Evans 1996, 73), its presence here suggesting a *terminus post quem* of this date for the final filling of the ditch.

The eastern trackway ditch (506) yielded only small amounts of material. A Crambeck greyware wide-mouthed bowl shows the feature to have been open until after *c.* AD 280. Material from the re-cut of this ditch was small and undiagnostic, though pottery from watching brief equivalents to one of them contained a distinctively late assemblage comprising HOSM greyware, Crambeck greyware, a Dalesware jar and sherds from several 'proto-Huntcliff' jars comparable to those from the lower well deposits at Rudston Villa (Rigby 1980, figs. 49-50). The balance of probability is that this assemblage dates from the first half of the fourth century.

Pottery was also recovered from the fills of ditch 298 on the west of the trackway. The assemblage from segment 226 included a Dressel 20 amphora sherd, but the latest material present was a twelfth century gritty ware jar (compare ditch 272, above). Segment 468 contained a small assemblage consisting largely of HOSM greyware, including pedestal bowls and straight-sided flanged bowls in the B3-4 and B8-11 range (Creighton 1999, 144-157). Segment 492 yielded a small assemblage including several sherds from a Crambeck greyware straight-sided flanged bowl (Corder 1937 Type 1), and a Dressel 20 body sherd. The fabric of the latter is consistent with a mid-third century or later date (see further Williams, below).

Three of the five pottery assemblages from the trackway ditches can be shown by the presence of Crambeck greyware to have been open after *c.* AD 280. At least one of them was probably open in the first half of the fourth century. The fill of ditch 425



contained an assemblage, in which the most diagnostic elements were: the rim of a Dalesware jar; a grooved sherd which is almost certainly from the upper body of a Huntcliff jar; and a whiteware rim fragment probably from a Crambeck hemispherical flanged bowl (Corder 1937, Type 5b). The Crambeck vessel would suggest that the ditch remained open after c. AD 360-70. Greywares included a hemispherical flanged bowl, and a wide-mouthed bowl, cf. form BT in the York series (Monaghan 1997, 1007). The York form-code is reserved for later third or fourth century AD "Throlam-type" vessels, though the fabric is probably too coarse to admit of a HOSM provenance in this particular case. There is also a body sherd from an East Gaulish (Rheinzaubern) dish of the late second or first half of the third century AD; a body sherd of Black-Burnished Ware; scraps of oxidised ware; and a third or fourth century Nene Valley colour-coated beaker base.

In ditch 503, segment 281, the only diagnostic material consisted of rim sherds from three different Huntcliff jars, suggesting that the ditch was open after c. AD 355. The form was in use in the region into the early fifth century.

Pottery was recovered from gullies 223, 507, 260, 282 and ditch 255. In gully 223, a very small assemblage from segment 265, included a HOSM-type rim sherd tentatively regarded as coming from a pedestal bowl, form B5 in the Holme form series. In gully 260, pottery came from segments 278 and 288. In segment 278, the latest pottery was two small sherds of seventeenth- or eighteenth-century Glazed Red Earthenware. The Roman pottery from the feature consisted of a fragment of third or fourth century AD Nene Valley colour-coated ware, greyware sherds which included a dish which could be of Severan date, and body sherds in fabrics within the range of the HOSM industry. The only diagnostic material in 288 was a scrap sherd from a Central Gaulish samian dish or bowl of Antonine date. Pottery was retrieved from three different segments of gully 507 (viz. 224, 261 and 276). The largest group (sixty-six sherds) came from segment 224, which yielded an assemblage consisting mainly of HOSM greywares, with a small number of coarse greyware body sherds. The HOSM component included rims of jar form J1a and bases from pedestal bowls in the B3-5 range. The jar was made at all three excavated HOSM production centres, and a later third or fourth century date must be proposed for this assemblage. Segments 261 and 276 contained small amounts of similar material.

Gully 282 contained a small assemblage of worn greyware and colour-coated scrap. The latter derives from an indented beaker in an unidentified fabric. Formal characteristics suggest a third century date for this vessel.

Ditch 255 yielded assemblages from both its 'general' fill (254) and upper fill (253). A fairly large assemblage from the general fill (fifty-eight sherds) contained large sherds from Dalesware and Dales type jars, scrap sherds of Nene Valley colour-coated beakers and oxidised ware, and large sherds from several HOSM vessels, including rims of forms B2e, B3a, B3-5, J1a/i, and F1c. A date of after AD 280 for the infilling of the ditch is provided by the rim of a Crambeck greyware simple-rimmed dish (Corder 1937, Type 2). The remaining elements of the assemblage would be entirely acceptable as contemporary, or up to the middle of the fourth century.

The upper fill of the ditch had a small, worn assemblage of similar date. Residual material is represented by a rim sherd possibly from an Antonine carinated jar.

#### Phases IV and V

Plough furrow 476 contained three small fragments of Roman greyware. Furrows 496, 482 and 439 contained small amounts of worn Roman and unattributed material. In the case of furrow 439, an unattributed gritty ware is probably medieval, and of a twelfth-century AD date. Field boundary 296 contained a single sherd of Late Blackware, dating between the late eighteenth and early twentieth century.

### THE POTTERY TYPES

#### White and oxidised wares (Fig. 7, no. 1)

Both categories were sparsely represented. White wares amounted to eight sherds, with an ASW of 8.5 g. These included a rim fragment from a Crambeck parchment ware Type 5b (Corder 1937). A necked bowl in a fine pinkish-cream fabric (Fig. 7, no. 1) has not been attributed to a production centre and is difficult to date. The form is essentially Belgic in origin but the basic type continued being produced in various fineware fabrics into the later third and fourth centuries, e.g. at Oxford (cf. Young 1977, Types C.75-C.80).

Oxidised wares totalled eighteen sherds with an ASW of 7.7 g. All were body fragments and there is little of evidential value. A small number of sherds may be from white slipped flagons.

#### Greywares (Fig. 7, nos. 2, 4 and 6)

With the exception of small amounts of Crambeck and Black-Burnished wares (see below), none of the greywares could be definitively attributed to named types. Having said this, it is clear that the great majority of the 'common' greywares are in the kinds of fabric which characterise the later third and fourth century AD East Yorkshire industries, and that the Holme-upon-Spalding-Moor kilns were probably the major supplier within this component. Common greywares amounted to 487 sherds, with an ASW of 19.3g. The following HOSM forms were recognised (types as in Creighton 1999): jar J1a/i (x 4); wide-mouthed bowl B1a/b/e (x 3); wide-mouthed bowl B2a/e (x 4); pedestal bowls in the B3-5 range (x 10, including examples of B3, B3a, B3b, B4, B5a); straight-sided flanged bowls D8-11 (numerous); dish D6 (x 1); and flagon F1c (x 1).

A smaller but distinctive component within the greywares comprises material in a number of distinctly coarse sandy or gritty fabrics. These amount to forty-five sherds, with an ASW of 10.4 g. The only form types noted were the Dales-type jar (Fig. 7, no. 6) and an undated necked jar (Fig. 7, no. 2). It may be noted that the Dales-type jar was produced in the HOSM industry (type J2) in similar gritty fabrics. Fabric B3 at Bursea, used for this form, seems also to be known from late second century contexts in East Yorkshire (Creighton 1999, 156).

Crambeck greyware amounted to twenty-four sherds, with an ASW of 24.0 g. They



derived from an estimated thirteen vessels, as follows (types as Corder 1937): Type 1 straight-sided flanged bowls (x 4); Type 2 straight-sided dish (x 1); Type 4 wide-mouthed bowls (x 3); Type 1 dish or Type 5a hemispherical flanged bowl (x 1). A slightly flanged rim fragment (not illustrated) may derive either from a small Type 1 open form, or from a flagon/jug. A further three vessels were represented only by body fragments.

Black-Burnished ware (BB1) was represented by a single sherd (13g) from the basal angle of an open form.

#### Shell-tempered wares (Fig. 7, no. 3)

There were sixty-three sherds, with an ASW of 13.4g. The only form recognised was the Dalesware jar, an estimated minimum of eight vessels being represented by rim sherds.

#### Calcareously tempered wares (Fig. 7, no. 5)

These wares amounted to 173 sherds, with an ASW of 13.2g. A handmade dish with outbent rim from gully 502 (not illustrated) may be compared to Antonine forms in the Black-Burnished series, e.g. Gillam (1970) 308, apart from this, the only forms recognised were 'proto-Huntcliff' and Huntcliff jars and associated types.

#### Amphorae (none illustrated)

There were five amphora body sherds, probably from four different vessels. ASW is 94.2g. The material was examined by David Williams, who reported as follows.

[All belong] ...to the globular-shaped Dressel 20 amphora form (Peacock and Williams 1986, Class 25). This type carried olive-oil from the valley of the River Guadalquivir and its tributaries between Seville and Cordoba in the Roman southern Spanish province of Baetica, and was the most common amphora form imported into Roman Britain (Williams and Peacock 1983). The globular Dressel 20 form was made over a long period, beginning in the reign of Augustus and lasting until shortly after the middle of the third century AD. The latest *titulus pictus* found on a Dressel 20 vessel is from Rome and dated to AD 255, during the reign of Gallienus (Rodriguez-Almeida 1989). Baetican olive oil was still exported after this date, though on a reduced scale and in a smaller, thinner walled version of Dressel 20 known as Dressel 23, that continued to be made until the late fifth/early sixth century AD (Carreras and Williams 2003). As the... [sherds under discussion are] ...pieces of non-diagnostic bodysherd, it is not possible to place them accurately within this period, though a consideration of the fabric of [the sherd from fill] 493 [of ditch 298] suggests that it may belong to the later part of the Dressel 20/23 time-frame.

#### Colour-coated wares (none illustrated)

There were twenty-five colour-coated fragments, with an ASW of 2.9g. They derive from a maximum of nine vessels, all of which are beakers and at least six of which are probable Nene Valley products. The only forms recognised are third and/or fourth century indented beakers, one of which (alluded to above) is scale decorated.

## Mortaria (none illustrated)

There were seven sherds, from five different mortaria. ASW was 37.4g. The material was examined by Kay Hartley, whose findings are summarised here. A complete report is contained in the archive. Four vessels were from the Mancetter-Hartshill potteries, Warwickshire and unfortunately derive from topsoil and machined layers 200 and 201. They comprise a concave hammerhead type, not earlier than the third century AD; two flanged types, one of which has an optimum date of c. AD 190-250; and a body sherd. Mrs Hartley considers that none of this material is likely to be earlier than the third century AD. A single Crambeck vessel, from ditch 299, is a Type 6 with two grooves (Corder in Wilson 1989, 31, fig. 3), of fourth century date.

## Samian (none illustrated)

There were eleven samian sherds, with an ASW of 10.4g. These came from an estimated seven vessels. Six of these were kindly identified by Brenda Dickinson. From Central Gaul came a dish or bowl sherd and a jar sherd with probable *en barbotine* decoration (both Antonine), and a sherd from a form 45, c. AD 170-200. From East Gaul (Rheinzabern) came sherds from a 31R, from a dish, and a dish or bowl. All are from the late second or early third century AD. A further very worn vessel, identified as samian too late for specialist analysis, is tentatively identified as a Central Gaulish form 31R, c. AD 160-200.

## CONCLUSIONS

The range of pottery in the Roman site assemblage has a probable date-range from at least the earlier second century AD through to the late fourth or earlier fifth. Much of the early material is residual in later contexts. The earliest pottery from the site probably dates to the second century AD and is reflected in small amounts of Central Gaulish Antonine samian and in residual fragments of carinated greyware jars of similar date. The site assemblage is, however, overwhelmingly of later third and fourth century AD date, the major supplier to the site in this period appearing to be the Holme-upon-Spalding-Moor greyware industries.

The ceramic evidence as a whole suggests that, despite its proximity to York, the site was an unpretentious rural settlement. There is a dearth of finewares, mortaria, and other types indicative of investment in a fully Romanised life-style, such types accounting for a maximum of approximately 8.4% (by sherd count) of the entire Roman assemblage.

## Catalogue of illustrated vessels

Illus. no.

1. Necked bowl. Wheelthrown. Fine pinkish-yellow fabric with very sparse small red inclusions and mica flecks. From fill 415 of segment 414 of ditch 495.
2. Jar. Wheel-thrown greyware. Light grey fabric with darker surfaces. Abundant ill-sorted angular to sub-rounded quartz grains c. 0.5-3.0 mm, extrusive on both surfaces. The rim plane is slightly distorted. From fill 217 of grave 216.



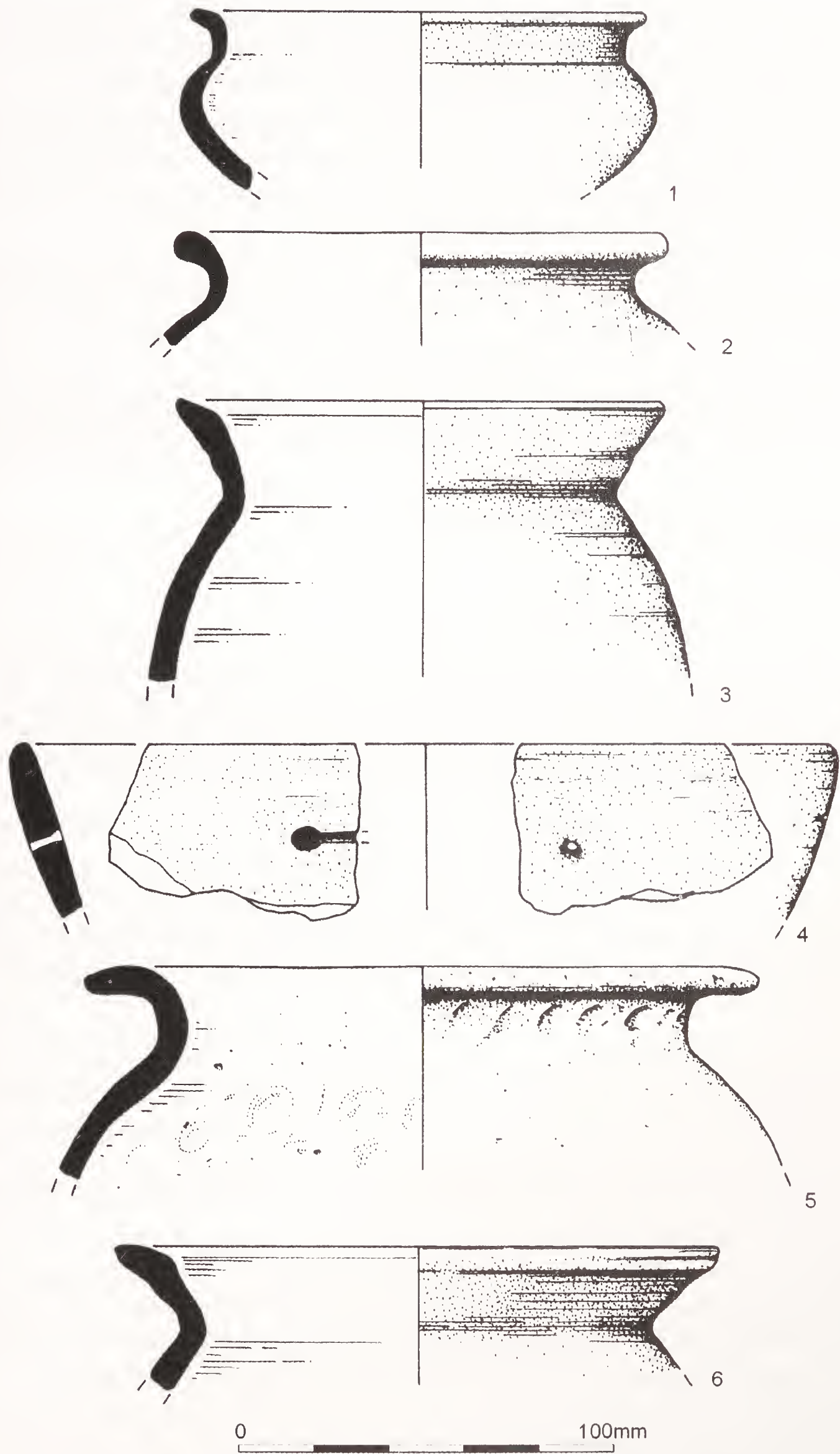


Fig 7. Millfield Farm: pottery 1:2

3. Dalesware jar. Wheel-thrown rim, handmade for lowest c. 15 mm of extant profile. Grey core, very dark grey surfaces. Abundant fine shell to c. 3mm. Carbonised deposits on flat top of rim. From fill 401 of segment 400 of ditch 299.
4. Crambeck greyware. Rim of Type 2 dish or Type 5A hemispherical flanged bowl (Corder 1937). The vessel has been perforated below the rim after firing. A V-shaped horizontal channel extends laterally from the perforation on the interior. From primary fill 122 of segment 120 of ditch 508.
5. Proto-Huntcliff jar. Wheel-finished rim. Very dark grey fabric with light grey core and pinkish margins in places. Cf. Rigby 1980, Fig. 49, no. 247 (Rudston Villa, lower well deposit). From primary fill 122 of segment 120 of ditch 508.
6. Dales-type jar. Wheel-thrown throughout extant profile. Hard brownish fabric with dark grey core and light red margins. Abundant ill-sorted angular quartz to c. 2 mm. Extensive carbonised deposits on exterior. From fill 254 of ditch 255.

## THE CERAMIC BUILDING MATERIALS

*By* J Tibbles

### INTRODUCTION AND METHODOLOGY

An assemblage of twenty-eight fragments of ceramic building material, retrieved from fifteen contexts, weighing 901 g was submitted for examination. Romano-British and post-Romano-British material was identified. Only the Romano-British material is discussed here, the other material is discussed elsewhere (NAA 2003a).

### THE ROMANO-BRITISH MATERIAL

An assemblage of seventeen fragments of Romano-British ceramic building material with a combined weight of 840 g was retrieved from thirteen contexts. The assemblage is comprised of Romano-British fabrics from which three building material types could tentatively be identified. The remainder was unidentifiable by form.

***Tegulae*:** *Tegulae* are the fundamental building material in the construction of the roof. They have particular features in the form of flanges on one face and upper and lower cut-aways that were required to allow the tile to slot into each other.

***Imbrices*:** Used in conjunction with *tegulae*, *imbrices* overlapped the flanges of the *tegulae* to produce a solid roof.

**Box flue-tile (*Tubulus*):** These square pipes were set within the walls as part of the hypocaust heating system of Roman buildings. They have characteristic combing or scoring of two surfaces as a keying element for plaster or mortar. They also often have a lateral 'cut-out' vent in the sides. This allowed the warm air to circulate.

### DISCUSSION

Due to the relatively small size, the potential of the assemblage alone is limited. Ceramic building material was considered to be a symbol of affluence or high status



and a valued re-useable commodity. Its presence among the finds assemblage reflects the possibility of a high status building within, or close to, the site. The general appearance of the assemblage, although abraded, appears to represent a range of ceramic building material that would have been associated with the various aspects of Romano-British construction. There is also a paucity of evidence of mortar adhesions to ascertain use prior to deposition. Therefore, despite being within an area of Romano-British activity, it would be conjecture to suggest the presence of a structure within the vicinity that was utilising ceramic building material.

Due to the dearth of the presence of specific ceramic building materials, i.e. *bessalis*, *pedalis* etc (bricks 8 and 12 Roman inches square, typically used for constructing hypocausts and arches), it is likely that the assemblage represents residual elements of Romano-British activity and suggests casual deposition. Nevertheless, this information is significant as it can add to the corpus of evidence of activity during this period for the area.

## RECORDED FINDS

By Jon Watt

## INTRODUCTION

The excavation produced sixty-two recorded finds (including a quern fragment and pipe-clay figurine see below); the majority were iron and difficult to date by form or function. However, with the exception of fourteen objects, either of recent manufacture (e.g. wire nails, a Dutch hoe blade, aluminium sheeting, etc.) or from medieval or later contexts, most were stratified within Roman features.

## CATALOGUE

The catalogue of recorded finds recovered during the excavation at Millfield Farm is summarised in the post-excavation assessment report (NAA 2003a) and includes an amber bead, a ceramic spindle whorl, a looped fitting, an iron awl, a scale-tanged knife and numerous fragments of nails.

## DISCUSSION

A looped fitting (Fig. 8, no. 4), perhaps for the attachment of a handle to a vessel such as a bucket, came from the fill of a tree bole (237). Evidence of industrial activity is provided by two tool fragments, a small tanged punch or woodworking awl and part of a scale tanged knife. A third object, two iron spikes partially welded together, was perhaps a part made item or metalworking debris. All three came from the trackway ditches. The most common finds were fragments from handmade iron nails. Such nails were manufactured from the Roman period up to the early twentieth century, however the majority came from Roman features. All were of similar construction, with oval or rectangular heads and rectangular sectioned shanks, corresponding to Manning's (1985) type 1B, general purpose carpentry nails 40-240 mm in length. Three much smaller nails with oval (domed) heads and short, broken, shanks are hobnails and probably represent casual losses from the soles of shoes

(*calceus*) or sandals (*solea*) (see Charlesworth and Thornton 1973), the head of one example has been worn almost flat through use. A number of iron plate fragments, strips, one of copper alloy, and pieces of lead melt were also recovered. A roughly conical lump of lead with an iron insert, from the fill of boundary ditch (299), is interpreted as a plug used to anchor an iron fitting, perhaps a hinge or wall hook, into a piece of masonry.

A spindle whorl (Fig. 8, no. 2) with an hourglass-shaped perforation chipped from the base of a Romano-British pedestal-based bowl was found within the fill of segment 400 of the main enclosure ditch (299). It was 44 mm in diameter, 14 mm thick weighed 35.6 g. The fabric is within the range of those used by the Holme-upon-Spalding-Moor industry in the later third and fourth century, forms B3-B5 in the Holme type-series (Creighton 1999, Fig. 5.35). By comparison with medieval whorls from Beverley it is of a 'large' size and suitable for spinning a relatively coarse thread (Robinson 1992).

A large annular amber bead, (Fig. 8, no. 1), was recovered from the fill of probable grave cut (216). An unusual and exotic material, the principal source of amber is the Baltic, well beyond the frontiers of the Roman Empire, though it is occasionally found in glacial deposits or washed up on beaches along the East Coast (Egan and Pritchard 1991). Widely traded since the Neolithic it was also in great demand during the Roman period (Grimaldi 1996). An isolated find, the bead was perhaps worn by itself like a 'pendant', although visually attractive, amber has also long been attributed magical and protective powers, a fact which probably influenced its use for beads and other items of personal jewellery (Foreman and Tweddle 1992).

## FRAGMENT OF PIPE-CLAY FIGURINE

By Philippa Walton

A fragment of a white pipe-clay figurine was recovered from the site (Fig. 8, no. 3); only the face of the figurine survives. Although quite worn, the figurine is obviously that of a woman. Her hair appears to be piled up on top of her head in an elaborate hairstyle of a type popular in the Flavian period. The pipe-clay continues to extend beyond her hairstyle, perhaps suggesting that the figure was originally depicted against some sort of background, perhaps a high backed chair.

Identification of the female depicted must remain tentative due to the fragmentary nature and wear of the surviving fragment. It is possible that the figurine was intended to represent a deified Flavian Empress, indicated by the elaborate hairstyle, which is stylistically dissimilar to those of Venus pipe-clay figurines.

Pipe-clay figurines manufactured from white clay in moulds, were produced in Central Gaul during the Trajanic-Antonine period and are found in mainly second century AD contexts in Britain (Jenkins 1986). Venus figurines appear to be the most common, although Dea Nutrix and Empress types are also known. Although their distribution has traditionally been considered to be biased towards south-east England (Jenkins 1958), discoveries from throughout the north from sites including Brompton-on-Swale, near Catterick (NAA 2003b), South Shields (Allason-Jones and



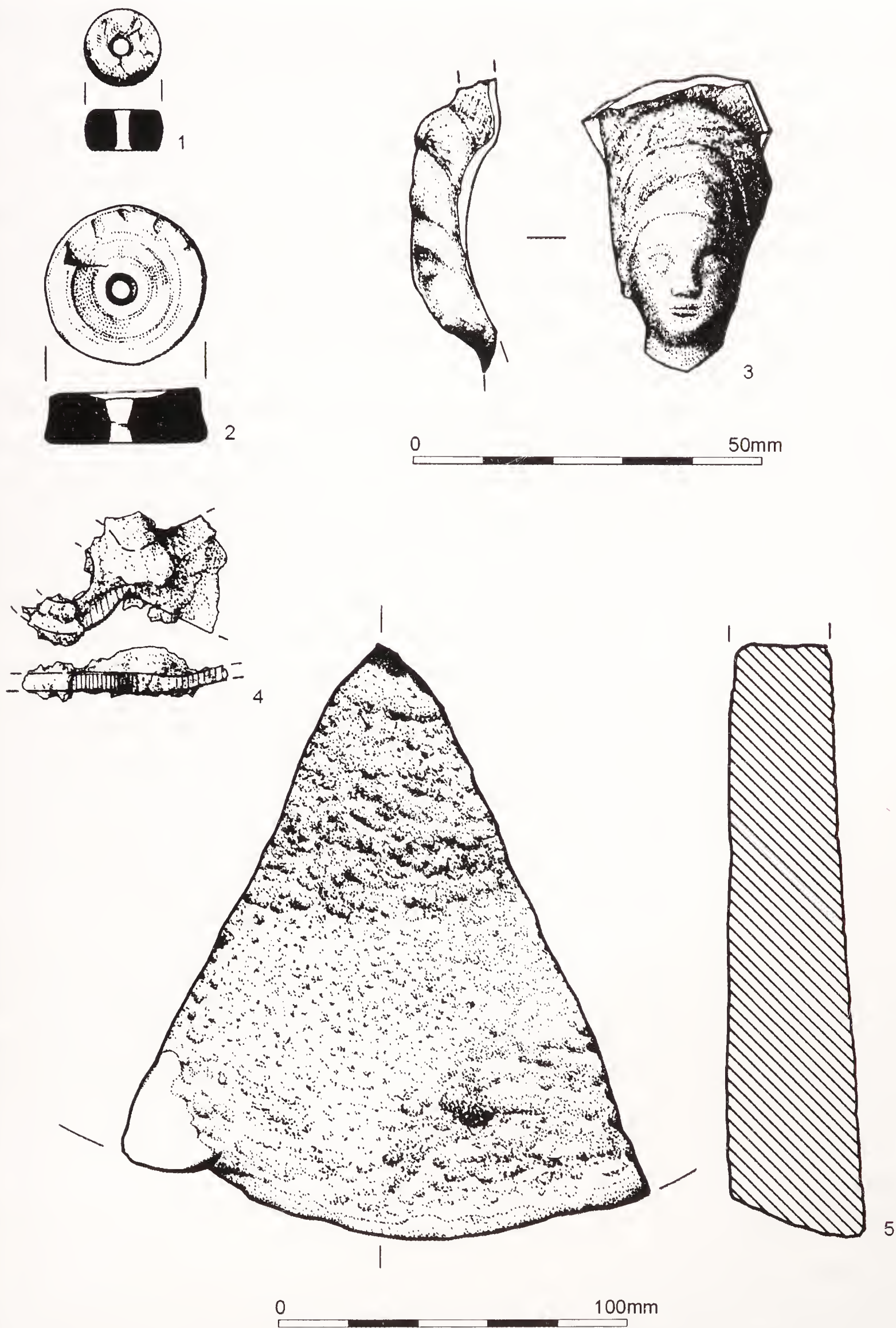


Fig 8. Millfield Farm: finds (1:2, no.3 1:1)

Miket 1984, 341, no. 9.63), Chesterholm (Green 1978, pl. 41) and Carlisle (Green 1978, pl. 36, 37 and 38) is forcing a reassessment of this view.

## QUERN FRAGMENT

*By Elizabeth Wright*

A radial fragment from a rotary quern (Fig. 8, no. 5) of fine to medium grained well-sorted micaceous sandstone with fine specks of iron minerals (either goethite or limonite) was recovered from within the fill of shallow ditch 425 (Phase III). The original colour is difficult to distinguish as the fragment has suffered heating during some secondary use, which has reddened the fabric. The material is probably a coal measures sandstone from Yorkshire.

The fragment, which measures 165 x 153 x 40 mm, shows evidence of wear on both flat faces and some shaping of the curved edge. It is 40 mm thick at the edge, narrowing to 27 mm where broken towards the centre, probably at the central eye, which always creates a weak spot. Although the quern fragment lacks distinctive features, being very plain and undecorated, the size and shaping suggest it is part of an upper stone of a hand operated quern of Roman date. The fragment is quite thin, which, while it might result from very heavy wear, could also suggest that it was originally of a thinner, lighter design. This would accord well with the low angle of inclination of the grinding face. The grinding face has been dressed with a fine pattern of peck dressing which had not worn totally smooth since last being re-dressed before breakage. The dorsal face shows much undulating smoothing that is unlikely to have resulted from rotary use. This suggests some secondary use perhaps after the quern was broken, but certainly before the fragment was as small as it is now as the polish does not extend over the broken edges. During the Roman period such secondary uses are common and may have encompassed use as the lower stone of a saddle quern, as a whetstone or even use in an area of paving or as a threshold stone. The diameter of the complete stone, estimated from its remaining curve is about 380 mm.

From the size, manufacture and signs of secondary use, this quern is almost certainly of Roman date. The thinness and plainness of the design, allied with the low inclination of the grinding surface might possibly suggest a date later in the Roman period, rather than earlier, perhaps tying in more with a third to fourth-century date than one in the second century. The small size suggests a hand quern rather than a millstone.

## SLAG

*By Jane Cowgill*

## INTRODUCTION

A total of 683 g (nine pieces) of slag and associated materials were submitted for recording. The slag was washed, dried and then identified solely on morphological grounds by visual examination, sometimes with the aid of a x10 binocular microscope. It was recorded on *pro forma* recording sheets.



## DISCUSSION

The small assemblage from the settlement site at Millfield Farm is diverse in character, and includes evidence for both iron smelting and smithing. The slag was not concentrated in any particular area and may therefore have been the by-products of several different episodes of iron production and smithing at the site. There is only one definite plano-convex slag accumulation, which was from the fill of ditch segment 409 (of ditch 502), on the western side of the site. Charcoal fuel was used when this piece was formed, including large pieces measuring 60 x 55 x 30 mm. The smithing slag which had coal inclusions (from the fuel) from feature 220 (context 221) may not be Romano-British in date.

The most interesting piece from this site is the smelting slag from the fill of grave 216 (context 217). The slag is neither typical of tap slags or block slags and forms part of an intermediary group that has so far only been identified at West Moor Park, Armthorpe, near Doncaster (Cowgill 2001), a site only some 42 km to the south of Wheldrake.

At Armthorpe a sequence of enclosure complexes were found but all the ditches were very truncated with often little more than 0.2 m of the basal fills surviving. The dating evidence was very limited and mainly in the form of Romano-British pottery dating to between the second and fourth centuries. There was also some Iron Age occupation at Armthorpe and it has been suggested that this slag is more likely to be Iron Age in date or very early/transitional Romano-British.

The tap slags found, like the piece from Wheldrake, are generally large and most seem to be composed of a number of large dense flows, much larger than those usually encountered. The size of the flows may indicate that the slag was quite viscous when tapped which could be a reflection of its temperature or composition. Some of the tap has vertical sides moulded by the tapping channel or pit. Another unusual feature is the fact that in many instances it is not possible to distinguish the top of the tap from the base, the orientation of tapped slags is usually obvious. This may be partly explained by the fact that some pieces have large charcoal imprints on the upper and/or base (resulting in some very irregular bases) and occasionally on all sides giving the impression that the slag was tapped into a charcoal heap. The Wheldrake slag has been moulded by massive pieces of charcoal, one measuring 60 x 35 x 18+ mm. It is an elongated 'flow' (130 x 65 x 60 mm) and once again its orientation is unclear. It is in a very fresh condition which suggests that it is in a primary deposit and has not suffered from weathering on a ground surface or re-deposition. This is an important piece and, when considered alongside the assemblage from West Moor Park, may hint at a regional form of iron smelting.

## THE HUMAN REMAINS

*By Joanna Higgins*

## INTRODUCTION

During the excavations the human skeletal remains of two individuals were recovered (Fig. 9). The inhumations were interred separately, orientated roughly north-west to south-east and were not in close proximity. A third grave was excavated and was

found to contain grave goods but no human remains.

#### Preservation and completeness

Skeleton 204 was well preserved but less than 40% complete, and extremely fragmentary. The surviving bone consisted primarily of long bone and skull fragments, and a partially complete dentition. Skeleton 212 was also less than 40% complete and extremely fragmentary. The surviving bone was in very poor condition and also consisted primarily of skull and long bone fragments.

#### Estimation of age at death

Skeleton 204 was estimated to be a young adult, aged about 25 years at the time of death. Skeleton 212 was estimated to be that of a middle aged adult, of between 42-52 years at the time of death.

#### Health and disease

The dentition of skeleton 204 only was suitable for pathological assessment,

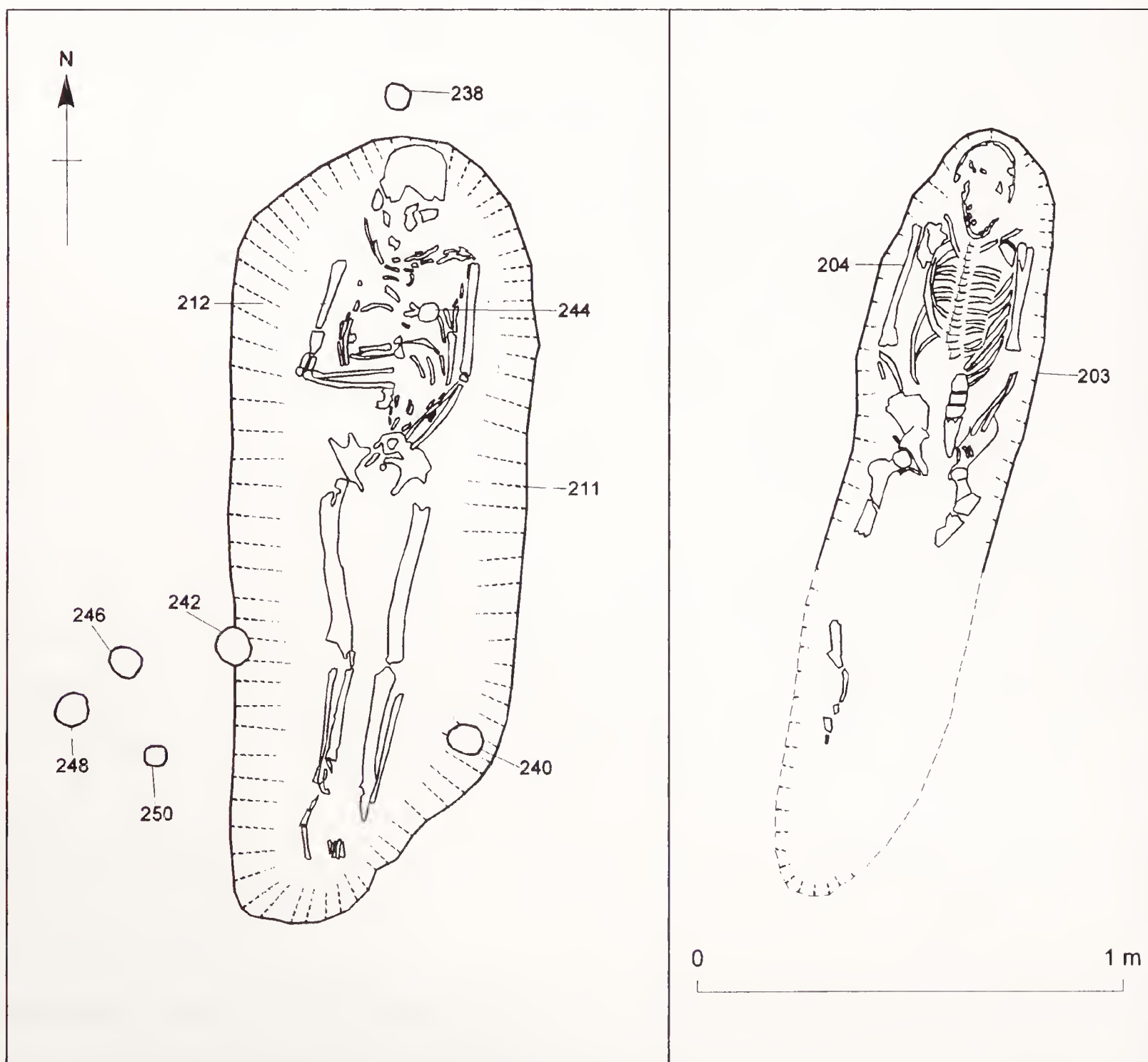


Fig 9. Millfield Farm: burials



although it was incomplete. This individual had no evidence of caries or dental enamel hypoplasia (0/13), or of dental abscess or ante-mortem tooth loss (0/12). However, slight calculus deposits were present on most teeth (11/13). There was some variation in premolar form in the dentition of skeleton 204. In the maxilla, the right first premolar had an accessory cusplet. In the mandible, the right second premolar was a three cusped variant. In addition, two small enamel pearls were present on the mesial and distal aspects of the root of the left maxillary third molar.

## DISCUSSION

The fragmentary and incomplete condition of skeleton 204 and skeleton 212 has limited the level of information each can provide about these individuals in life. The presence of slight calculus and the absence of other dental pathologies in skeleton 204 can be considered normal for a young adult from an archaeological population. The premolar variants in skeleton 204 are very common (Hillson 1996), and are most likely genetically linked. However, in isolated individuals they are of limited value as markers of populational or familial relationships. The occurrence of enamel pearls on the exterior surface (extradental) of a tooth root (radicular) is a fairly common developmental anomaly thought to occur as a result of abnormalities in embryological development, although the precise cause is unclear (Ortner 2003). The anomaly is asymptomatic, and is most frequently found in the maxillary molars (Pindborg 1970), as was the case here.

## BIOLOGICAL REMAINS

By Allan Hall, Deborah Jaques and John Carrott

## INTRODUCTION

Sixteen sediment samples (of twenty-seven collected), two fragments of hand-collected shell, and one box of hand-collected bone, recovered from the excavation were examined during an evaluation of their bioarchaeological potential (Hall *et al* 2003).

## DISCUSSION

### Soil Samples

Fourteen of the samples were processed for the recovery of plant and invertebrate macrofossils. All of the resulting washovers consisted of (at most) a few millilitres of material, much of it small clasts of concreted sediment (perhaps pan) of no more than about 1mm in size. With this were small amounts of charcoal, coal, and sometimes traces of cinder-like material, and a very few charred plant remains (thought mostly to be ancient). The latter included charred ?heather root/twig and other charred root/rhizome fragments which may represent remains from the burning of peat and/or turves. This kind of material is being recorded from many late prehistoric and Romano-British sites in the southern (and especially south-eastern) Vale of York (Hall *et al* 2003). Uncharred seeds and roots, recovered from most samples, were clearly modern. No invertebrate remains were recovered from the samples. The residues were all mostly of stones and sand and, with the exception of occasional fragments of unidentified bone, were barren of biological remains.

### Shell

The two poorly preserved fragments of shell, identified as possibly oyster (cf. *Ostrea edulis* L.), were from a topsoil layer and of no interpretative value.

### Animal Bone

The vertebrate assemblage totalled 717 fragments, representing forty deposits, most of which were assigned to the Romano-British phases. Ditch fills produced the largest concentrations of bone but, generally, the material was too poorly preserved and fragmented to be of much interpretative value. The more poorly preserved fragments had very degraded surfaces, which was primarily a consequence of chemical erosion while in the ground. Fragmentation was extensive and largely the result of fresh breakage damage. Many of the bones recovered could only be identified to categories such as large or medium-sized mammal, although those which could be more closely identified included cattle, horse, caprovid, pig and dog. The most numerous elements identified for both cattle and caprovids were isolated teeth and other elements of denser bone, which are more robust and generally survive better. Skeletal element representation, therefore, reflects the preservational conditions rather than any particular disposal patterns, with the possible exception of fifty-one poorly preserved fragments of bone recovered from a truncated feature (208). The remains were identified as cattle, and probably represented the bones of one front leg originally deposited in articulation. This, apparently deliberate, placement of articulated limbs within pits or ditches is a common feature of Iron Age and Romano-British sites. Their location, and association with other artefacts, has often resulted in their interpretation as ritual or special deposits (Grant 1984; 2002). The remains recovered here may represent such a deposit, but, bearing in mind the condition of the fragments and the evidence of disturbance which may have resulted in the destruction of other bones, this interpretation can only be tentative.

### RADIOCARBON ANALYSIS

*By* A G Hogg

A single charred twig fragment from the fill of possible grave 216 was submitted to the University of Waikato Radiocarbon Dating Laboratory for radiocarbon assay. The age of the sample was measured as 60-250 cal. AD (Wk14322, 1866 $\pm$ 38 BP) at a probability of 95.4%. The results are shown in Table 2.

### DISCUSSION

The excavated features were located on a low ridge some 16m OD in height orientated north-east to south-west. To the north-west and south-east of the ridge the land was generally flat at approximately 7 m OD. Topographically the features occupied a prime location for settlement as the lower surrounding land would have been prone to flooding (Ramm 1978).

The general layout of the features suggested a small settlement lying alongside a trackway on high ground that dominated a largely flat landscape. The earliest



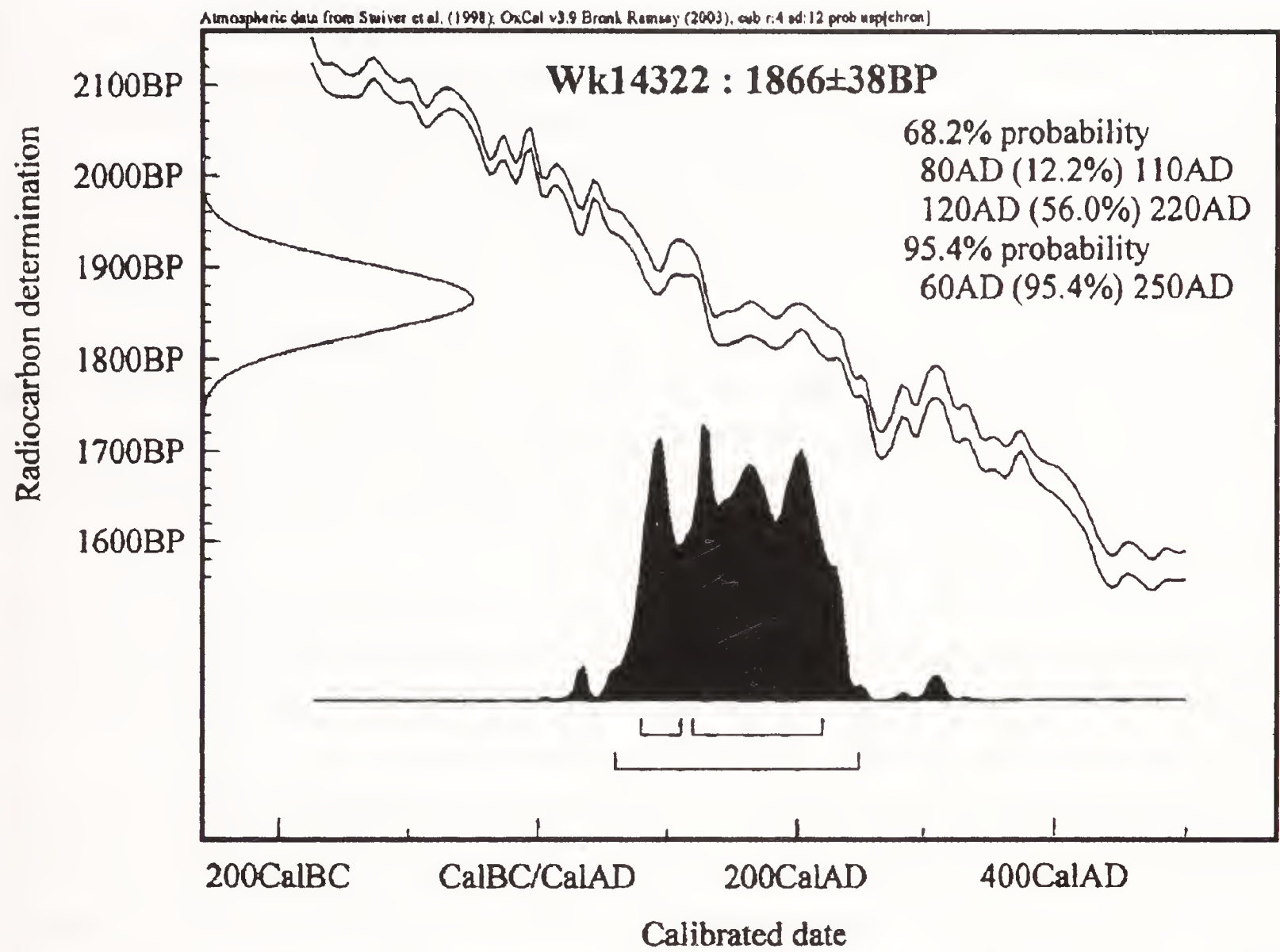


Table 2. Results of radiocarbon dating of a charred twig from grave 216

features excavated were two inter-cut ring gullies, these were the only features confidently assigned to Phase I. The Phase II and III boundary ditches were roughly aligned on or perpendicular to the ridge. These ditches formed a number of enclosures and within the south-western corner of the excavation evidence of short internal fences or structures were recorded. The settlement during Phase II included at least two enclosures and a small cemetery, presumably on the edge of the area of occupation. This area may have been built on during Phase III as the settlement expanded adjacent to or around the trackway. The full extent of the Romano-British phases of settlement is still unknown as only limited excavation within the pipeline corridor was undertaken. The features and artefact concentrations suggest that the main focus of activity was located on the summit of the ridge, immediately to the south-east of the excavation.

The Phase I ring gullies represent two phases of roundhouse construction that were abandoned by Phase II. The short linear gullies that replaced them may represent replacement of Iron Age style roundhouses with rectangular timber structures. Evidence that a stone walled Roman style building was built within the vicinity of the excavated area existed in the form of *tegulae* and *imbrex* roof tiles, box flue-tiles, concentrations of stone within a number of features and a lead wall plug.

The replacement of roundhouses with rectangular buildings at Millfield Farm may be paralleled at the similar site of Stockton Moor West (below) where the quantity of

fired clay tile and limestone tile fragments recovered also suggested the presence of a well constructed building in the vicinity. A similar pattern was recorded at site 718 close to Sike Spa, Crayke, near Easingwold during construction of the Teesside to Saltend ethylene pipeline. A possible late Iron Age roundhouse represented by a ring gully that was replaced in the second to third century AD by a rectangular stone building, was recorded during an archaeological investigation of the site (Wood *forthcoming*).

Reconstruction of the economy of the settlement is problematic as only limited evidence was recovered. It is clear however that metal-working occurred on or near the site as both smelting and smithing slags were found. Evidence of the cultivation of cereals and animal husbandry was also recorded suggesting that the inhabitants of the settlement practiced a mixed farming regime. However, no specific features were identified as being associated with these activities.

The Phase I ring gullies remain undated but were abandoned some time before the late third century and may have been in use during the Iron Age. The second phase of activity was abandoned by the late third century. Phase III activity was dated to between the late third century to the late fourth century.

The pottery assemblage recovered contained mainly local wares from the nearby kilns at Holme-upon-Spalding-Moor and Crambeck with very few imported forms. As noted above the excavation was on the edge of the settlement and hence the pottery assemblage may not give an accurate picture of the status of the settlement, although it is possible that due to the lack of 'high status' forms recovered during the excavation Millfield Farm may represent a 'non-villa' settlement, the most common form of rural settlement in Roman Britain (Hingley 1989). However, it should be noted in this context that the pottery assemblage recovered from the broadly contemporary nearby site at Sutton Hall contained a similarly small proportion of imported wares yet the limited excavation produced high status items such as a gold earring and vessel glass (Chapman *et al.* 1999, 187).

The Phase II burials were widely spaced and few in number suggesting that this was not a formal cemetery but a less organised form of burial common at Romano-British sites such as Thurnscoe, South Yorkshire (Neal and Fraser 2004) and Stamford Bridge some 11 km north-east of York (Parry, *forthcoming*). The fact that the area of burial may have been built on during Phase III adds weight to this hypothesis as it was a common Roman practice to avoid building on cemeteries (RCHM 1962; Wachter 1974; 1978). Moreover, human burials legally had to be located outwith the boundaries of settlement (Wachter 1978), so the discovery of the cemetery at Millfield Farm would tend to confirm the suggestion that the site is located on the periphery of a settlement.

The settlement was located adjacent to a north-west to south-east orientated trackway, which appears to be aligned towards York. The settlement as a whole seems to have expanded during Phase III and the enclosure in the south-western corner of the excavation may have shifted 15 m to the north-east. The trackway at Millfield Farm was only 7 m wide at most which is small when compared with any known Roman roads (RCHM 1962; Rowland 1974; Hunter-Mann 1997). It is therefore more reasonable to think of the trackway as no more than a small thoroughfare, part of a



network of such sinuous roadways similar to those visible within the cropmarks around Wheldrake Wood (English Heritage 1998).

The Millfield Farm trackway does not line up with any known Roman road, there is however a road that is thought to have headed south-east from Roman York possibly to the area around the Holme-upon-Spalding-Moor pottery industries (road 1; RCHM 1962, Ramm 1980). The line of this road is preserved in a parish boundary and if this line were extended, it would pass some 1.6 km west the site. It is interesting that a large proportion of the pottery found at Millfield Farm came from the Holme-upon-Spalding-Moor industries some 30 km away and none has been identified as originating from the York based industries a mere 10 km from the site. This pattern could be a product of excavation bias, an economical preference or personal taste for one form of pottery over another. However another theory is that the occupants of the settlement were largely receiving goods directly from the Holme-upon-Spalding-Moor pottery industries and not via the York markets.

The hinterland of York suffers from a dearth of excavated archaeological evidence for rural settlement activity during the Romano-British period (Addyman 1984; Jones 1984; 1988). Even more recently, only a few archaeological sites (see below) have been discovered within 10 km of the city that relate to settlement outside of Roman York. Aerial photographs of the area give a patchy view of mostly undated field systems and possible settlements (Jones 1988). Limited dating from excavations at Lingcroft Farm suggest that at least some of these cropmarks relate to the Romano-British landscape (*ibid.* 1988). It is clear that the hinterland of York was farmed during the Romano-British period (*ibid.* 1988) but the archaeological record only reveals a partial picture. The Vale of York Wetlands Survey reviewed the archaeological evidence for the area and concluded that, for the Roman period, there was evidence for activity along the rivers and at their crossing points. However, as for most periods before and after, the main evidence for occupation was concentrated along the Wold-edge and on the limited areas of higher ground within the Vale itself (Head *et al.* 1999, 128-31).

Although there are no cropmarks recorded within the immediate vicinity of Millfield Farm, two concentrations have been located by aerial photography within a few kilometres of the site (Jones 1988; English Heritage 1998; NAA 2002). The closest is a prehistoric or Romano-British landscape comprising an extensive field system with associated smaller enclosures and settlements identified as cropmarks to the north-west of Millfield Farm (English Heritage 1998). The second concentration of field systems and settlement related cropmarks is close to Lingcroft Farm, Naburn some 5 km north-west of Millfield Farm. Investigations of the cropmarks at Lingcroft Farm carried out by Bradford University recorded Iron Age field systems containing some settlement activity in the form of ring gullies. In a later phase of activity dated to the early part of the second century AD, the ring gullies had been abandoned but the field system remained mostly intact with little visible reorganisation (Jones 1988). The assemblage of artefacts recovered from the excavations was smaller than that collected at Millfield Farm but included Eboracum ware pottery, and a high proportion of 'high status' pottery and fragments of high quality glass vessels. The artefacts were also of an earlier date than those at Millfield Farm.



The Romano-British ladder settlement at Sutton Hall to the east of Wheldrake has been noted above. A Romano-British site encountered during monitoring of the Moor Monkton to Elvington Yorkshire Water pipeline was partially excavated at Stockton Moor West (SE 648 545) (Pearson 1996; Hall and Stockdale 1997). The evidence was interpreted as a Romano-British farmstead. The excavated features included a large rectangular ditched enclosure that extended out of the area of excavation towards a low mound to the east. Within this enclosure was evidence for crude post-built structures and possible stock enclosures. A number of other boundary ditches extended from the enclosure to the north. Evidence for a single small rectangular structure to the north of the enclosure consisted of a number of shallow 'sill beam' trenches. Beyond this were a number of smaller undated ditches and circular enclosures which may have been part of the Roman-British farmstead or an earlier Iron Age phase of activity. However, the pottery recovered during the excavation was dated approximately between AD 150 and AD 325 and no recognisably Iron Age pottery was collected. A quantity of building material recovered, including fired clay tile and limestone tile fragments, may have indicated the presence of a well constructed building in the vicinity, possibly located on the low mound outside the area of excavation. The assemblage of pottery recovered from Stockton Moor West was similar to that collected from Millfield Farm in that it contained a small amount of Nene Valley ware, Samian and Amphorae of the Dressel 20 type. However the assemblage from Stockton Moor West included a small amount of *Eburacum* ware, which was noticeably absent at the Millfield Farm site.

Another similar site was discovered at Mill House Farm on the west side of Kexby (SE 6930 5135) during monitoring of the Elvington to Harton Yorkshire Water pipeline (Pearson 1997). The site comprised a number of probable boundary or enclosure ditches associated with two ring gullies, which may represent structures, and a number of pits and postholes. The features were interpreted as part of a larger Romano-British settlement which, based on the pottery found within the features and during field walking, was dated to span the late Iron Age and early Romano-British periods. The amount of pottery recovered was small when compared to the assemblages found at Stockton Moor West and Millfield Farm and the Roman pottery dated to the second to third century.

It is notable that the pottery from Stockton Moor West is of a similar date range to the Millfield Farm material and if the Stockton Moor West circular features were of an Iron Age date, this would suggest a similar change of structural form at a similar date to that observed at Millfield Farm. Extensive re-planning within York in the third century has been attributed to the promotion of the settlement to a colonia by AD 237 (Wacher 1974; 1978 Carver *et al* 1978). However, the archaeological evidence from the area surrounding York fails to conclusively prove that these changes extended to any reorganisation in the hinterland. The dating of activities at Millfield farm and Stockton Moor West is too vague to provide any conclusive argument either way.

It is unlikely that the present distribution of cropmarks, excavated sites and artefact scatters represent the actual pattern of the Romano-British landscape (Jones



1988) and areas devoid of cropmarks could still have been occupied in antiquity (Addyman 1984). The southern boundary of the cropmarks around Wheldrake wood corresponds exactly with a change in underlying geology to glaciolacustrine clay and it was suggested that this pattern was more to do with the visibility of cropmarks in different geological conditions rather than the distribution of archaeological remains (NAA 2002). The discovery of the previously unknown settlement at Millfield Farm and Sutton Hall in areas lacking cropmarks demonstrates that the prehistoric and Romano-British landscape identified around York is more extensive than present cropmark evidence depicts.

This evidence presents no more than a fragmentary picture of rural life within the hinterland of Roman-British York, but by placing the site of Millfield Farm within this landscape, a broad synthesis is possible.

The formation of Roman York has been attributed to the building of a legionary fortress by AD 71 (Hartley 1980) and the subsequent development of a civilian settlement on the opposite bank of the River Ouse (Wacher 1974; 1978; Addyman 1984; Jones 1988; Millett 1990). It is clear from the investigations at Lingcroft Farm (Jones 1988), Mill House Farm (Pearson 1997) and from cropmark evidence, that the fortress at York was constructed within an existing landscape of Iron Age style settlements and field systems. However the evidence does not show a whole-scale reorganisation of this landscape (Jones 1988) due to the presence of a military base as happened at Hayton (Ramm 1980) where the auxiliary fort, Roman road, trackways and field systems were '...imposed on the earlier landscape.' (*ibid*, 37). It is true that a civilian settlement grew up around the fort, probably drawn by the opportunity for trade created by the presence of the military (Wacher 1974). This settlement grew over time until at its height, as a *colonia*, Eburacum was a centre for international trade (Ramm 1974; Wacher 1974). The growth of *Eburacum* must have had an effect on the surrounding landscape (Addyman 1984) of farms and settlements which would have presumably provided food and raw materials for the city. Through the network of trackways and Roman roads, and via the river Ouse, the local population would have been connected to the Roman Empire as a whole, so it seems strange that there is a lack of visible signs of a more Romanised way of life. Recognisably Roman artefacts did not reach the site at Lingcroft Farm until the early second century (Jones 1988) and reached the sites at Millfield Farm, Mill House Farm and Stockton Moor Wes between the late second or early third century.

Branigan (1980) suggests that the hinterland of York would have been a prime location for retired legionary veterans or wealthy merchants to set up villa estates, so the dearth of excavated examples of such sites (Jones 1984; Sargent 2002) is interesting.

The evidence reads almost as if the local population was reluctant to take on a fully Romanised way of life and possibly invested any newfound wealth in other ways (Hingley 1989). There is some evidence of unrest amongst the native peoples of the north of England during the Roman occupation (Hartley 1980) suggesting that not all the inhabitants desired to emulate the Roman way of life. It is likely, however, due to the lack of villa estates discovered within the hinterland of York, that there was no

concerted effort on the part of the Roman authorities to re-order the immediate countryside. Adoption of Roman artefacts and building styles may have therefore been driven by gradual change involving a more complicated two-way process between the occupying forces and an entrenched local population.

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## THE ROMAN ARCHAEOLOGICAL EVIDENCE OF HOLDERNESS

By L. Hyland

*This article discusses the recorded archaeological evidence for activity in Holderness during the Roman period. A subject which has been sadly neglected. The research demonstrates that the region is far from being an archaeological void, instead a range of Roman period artefacts have been found distributed widely across the Holderness plain. Coin and pottery evidence shows that activity took place throughout the Roman period. A number of occupation sites have been identified and it is suggested that subsistence was agricultural in nature. An examination of Aerial photographic evidence revealed over 100 records to sites of potential prehistoric or Roman activity. There appears to be a correlation between the location of the evidence and, areas of alluvium and water courses. This may indicate that water transport, and access to the River Humber, was important. Though the nature of the activity is poorly understood and the evidence asks more questions than it answers, there is archaeology yet to be discovered, and the area is deserving of a more detailed investigation.*

### INTRODUCTION

The Roman archaeology of the plain of Holderness, East Yorkshire, has long been neglected. This fact is clear from the most recent assessment of the Roman archaeology of Yorkshire in which Holderness receives only a cursory mention (Ottaway 2003). The archaeological evidence for Roman activity was originally collated by Mary Kitson Clark in the 1930s (Clark 1935) and again in 1979 by Loughlin and Miller (1979) in their "Survey of Archaeological Sites in Humberside." However, on none of these occasions was any real attempt made to interpret the evidence. The only significant fieldwork conducted recently has been that by the Humber Wetlands Project (Van de Noort and Ellis 1995), as well as an excavation at Leven in 1992, and the continuing archaeological evaluations in advance of the construction of gas pipelines in the south of Holderness has led to the excavation of a Romano-British site at Easington in 2003/4. The result of this neglect has been to produce the misconception that there is virtually no activity in Holderness during the Roman period. This study aims to collate the archaeological evidence contained in archives, such as the Humberside SMR, the National Monuments Record (NMR) and the Portable Antiquities Scheme, to update the previous surveys and for the first time examine this significant Roman activity in its landscape.

### BACKGROUND TO HOLDERNESS

The low-lying Holderness plain is situated between the Yorkshire Wolds and the North Sea coast (Fig. 1). The geology comprises Cretaceous rock, principally chalk, which is overlain with clayey tills that were deposited during the last ice age, and



Fig. 1. The Location of Holderness



rarely rises above 30 m OD (Ottaway 2003). Deposits of sand and gravel form undulations which rise above the flat plain (Long *et al.* 1998). The meltwater from the end of the last ice age has been shown to have flowed through Holderness to fill the Hull valley and the River Humber. As the level of the River Humber rose the stream channels feeding it became flooded as the flow of water was impeded. This resulted in the accumulation of alluvial sediment in the channels and along the Humber foreshore (Van de Noort and Ellis 1995). Studies have shown that the River Humber reached its maximum lateral level *c.* 3500 years BP (Van de Noort and Ellis 1995). Since then there has been a contraction of marine conditions and alluvial deposition which has extended the land of Holderness southward. The extent of the alluvial deposit is shown in Figure 2. How far south the alluvium extended by the Roman period is not known. However, work in the Hull Valley by Peter Didsbury suggests that alluvium over till lying higher than 3.80 m OD was probably no longer underwater and could provide an exploitable surface (Didsbury 1990). In the higher reaches of the stream channels where the water had become shallow and free from estuarine influences, freshwater conditions developed. This led to freshwater alluvial deposition and peat formation (Long *et al.* 1998). In the poorly drained hollows, meltwater from the retreating glaciers collected, resulting in the formation of a number of meres, of which Hornsea Mere is last remaining example. It is thought that the smaller meres soon silted up (Van de Noort and Ellis 1995), though many meres were known in the Medieval period, however, by the seventeenth century only a few remained (Sheppard 1966).

From this discussion of the drainage and topography, it is clear that the appearance of Roman Holderness was significantly different from today. The upper reaches of the many stream channels, such as the Hedon and Keyingham Fleets, comprised carr and marsh. The gently undulating surface, largely clear of woodland since prehistoric times (Van de Noort and Ellis 1995), contained areas of mere with the intervening land probably being used for agriculture, either as animal grazing or the growing of cereal crops. It was not only the landscape that was different; the shape of Holderness has also changed considerably. Holderness has one of the fastest eroding coastlines in the UK. As a result, a considerable amount of land, and the archaeological evidence it contained, has been washed away. How much land has been lost is not known, and estimates of the rate of erosion vary. George de Boer has shown that, since the mid nineteenth century, erosion rates along the coast have varied from 0.15 m to in excess of 2.0 m per annum, with the higher erosion rates appearing to occur between Withernsea and the Spurn peninsula (de Boer 1996). As a result, there is potential for the Holderness coastline to have receded by as much as 4 km in places since the Roman period. The high rates of erosion are a result of a number of factors, such as: the composition of the till cliffs, which when wet is easily eroded; the orientation of the coastline which exposes it to the worst effects of the North Easterly gales, and it is particularly vulnerable to the south away from the limited protection of Flamborough Head; and the narrow beaches which are unable to absorb the energy of the waves (Van de Noort and Ellis 1995). The eroded material is carried south by the process of Longshore Drift and is instrumental in the formation of the Spurn peninsula. Some of the material is carried into the Humber estuary, and at the present time is the main source of sediment accumulation in the estuary (Long *et al.* 1998).





Fig. 2. The Distribution of Roman coins in Holderness



## THE ARCHAEOLOGICAL EVIDENCE

The archaeological evidence discussed below was retrieved from a variety of archive sources, and publications. It must be mentioned that the records, particularly the older examples, do not contain complete or accurate details. This has led to some difficulty in assessing the evidence, as details such as exact location, or even the identity of the artefacts, were not adequately recorded. In some cases the precise location of the evidence was not recorded, though in virtually all cases it was possible to provide a grid reference to within a 1km grid square. Investigation into many of these inaccurate and ambiguous records is ongoing. Despite these drawbacks, the records do provide sufficient detail for a broad analysis of the distribution of Roman activity across the Holderness region to be undertaken. In order to carry out this analysis it was divided into artefactual and aerial photographic evidence. The former category was then subdivided into the principal artefact groups, the most common being coins and pottery. Other groups with significant numbers of records were brooches, references to settlement, and querns. Other artefacts which had only one or two records were grouped together under "other finds."

### The Coins

The majority of the coins in Holderness were recovered as stray finds, either from fields or the eroding east coast and details are presented in Table 1. They include a wide range of denominations, periods and base metals. The records make reference to a number of coin hoards found in the region. The oldest record is a letter written in AD 1571 which states that approximately sixty coins were recovered when a house in Auburn was swept away by the sea (Lemon 1856). The present location of some of the Holderness coins is unknown, though others are in the Hull and East Riding Museum.

An examination of the coin records show a date range extending from the Roman Republic to the end of the Roman period. The apparent absence of coins from the first half of the third century is worth noting. A low occurrence of coins from this period has been recorded at a number of town sites by Casey (1980) and Reece (2002). The pattern of coin loss for sites in the East Riding has been studied by Sitch, who concluded that the coin loss profile resembled other regions (Sitch 1998). It appears that the coin loss profile for Holderness may also be similar.

Although the coins tabulated represent the more common denominations, the presence of at least two fourth century gold coins is worth noting. These are a solidus of Magnentius found in Hornsea and a coin of Gratian from Patrington. Finds of gold coins are relatively rare in Britain, and to have two fairly close together may suggest that there were people of substance in Holderness.

Figure 2 shows the distribution of Roman coins across Holderness. It can be seen that there does appear to be a concentration of coins towards the present coast and the alluvium of an earlier foreshore of the River Humber, though it must be remembered that the coastline was considerably further east in the Roman period. What is not known is the extent to which Roman activity was taking place on the alluvium, which will be discussed below.

Table 1: The Roman coins found in Holderness.

Description	Location
Surface finds of Roman coins on the cliffs at Aldbrough.	Aldbrough
A dupondius of Vespasian found in 1956.	Aldbrough
A Roman Republican denarius dated to 68-66 BC.	Atwick
In AD 1571 a Roman coin hoard dating AD 69 to 161 was found.	Barmston
Unspecified Roman coins.	Barmston
A bronze coin of Constantius II, AD 337-361.	Bilton
Anonymous civil war denarius, circa AD 68.	Burstwick
A number of silver & bronze coins have been found on both sides of Spurn Head.	Easington
A denarius of Hadrian dated to AD 125-128.	Easington
Various coins have been washed out of the cliff.	Easington
Silver denarius minted AD 103-111.	Easington
A hoard of 3rd century Roman coins.	Hedon
Silver Radiate of Tetricus I, AD 270-273.	Hedon
Copper Alloy Sestertius, AD 193-211.	Hedon
A copy of a Gloria Exercitus coin of Constanus, AD 335-341.	Hedon
A silver denarius of Faustina.	Holmpton
A Roman gold solidus of Magnentius, AD 350-353. Mint of Trier.	Hornsea
A Roman bronze coin of Licinius, AD 307-323.	Hornsea
A coin of Antonius Pius struck in Alexandria, AD 138-161.	Hornsea
Two Roman coins, Faustina I and Constantius II.	Kelk
A 4th century AD Roman bronze coin of Vespasian.	Keyingham
Bronze coin of Constantian.	Keyingham
SMR record of 2 coins reported by Hull Museum in 1967 and 1962.	Ottringham
Roman coins from Tiberius to Constantine I in Patrington and district.	Patrington
A gold coin of Gratian dated AD 367-383.	Patrington
A Roman nummus of Valentinian II, AD 378-383.	Paull
A copper alloy Roman radiate coin of Carausius, AD 287-293.	Paull
A copper alloy Roman nummus of Valens, AD 364-378.	Paull
A copper alloy Roman nummus of Constantine I, AD 330-335.	Paull
A copper alloy Roman sestertius of Clodius Albinus, AD 193-197.	Paull
A scatter of seven third and fourth century copper alloy coins.	Paull
A copper alloy nummus of Constantine, AD 316-317.	Preston
A silver Roman denarius of Septimius Severus, AD 196-197.	Preston
A coin of Carausius, AD 287-293.	Sigglesthorne
Base-silver radiate of Claudius II, AD 268-270.	Sproatley



A Roman coin hoard containing silver and bronze coins from the first and second centuries.	Swine
An urn containing between 14 and 1500 Roman copper coins, dated between AD 305 and 366, was found in 1826.	Swine
A Romano-British jar containing 3000 coins dated to AD 335-366.	Swine
Two Roman coins from Swine presented to Hull Museum.	Swine
A possible Roman coin hoard South of Great Stanks.	Swine
Possible fourth century Roman coin hoard in Swine.	Swine
A coin of Magnentius, AD 350-353.	Swine
A number of coins have been picked up in Bridlington Bay.	Ulrome
A hoard of copper alloy coins from Ulrome.	Ulrome
A Roman Republican silver denarius of Quintus Antonius Balbus and Silver denarius of Emperor Trajan, AD 98-117.	Ulrome
18 coins found on Ulrome beach are now in Hull Museum.	Ulrome
In 1969 a number of denarii from Vespasian to Marcus Aurelius were found on Ulrome Beach.	Ulrome
Stray find of a coin of Salonina, wife of Gallienus, AD 253-273.	Withernsea
500 Roman bronze coins dated from AD 258-293 were washed out of a cliff.	Withernsea

The Pottery

The records relating to pottery tend to be incomplete, and only in a few cases are identifiable fabrics recorded. For the most part pottery is merely referred to as Roman or Romano-British. The main fabric types which are included are, samian, Huntcliff, Crambeck (Wilson 1989), and Roman grey wares. Like the coin evidence, the pottery shows activity throughout the Roman period. Samian wares in the first and second centuries with Huntcliff and Crambeck Wares in the later third and fourth centuries.

Figure 3 shows that Roman pottery is distributed over much of Holderness, though there appear to be concentrations around Keyingham, Easington and Kilnsea, Withernsea, and Barmston, areas close to Humber and east coast, comparing well with the distribution of coins. The majority of the pottery appears to be of domestic origin, though a number of cremation urns have also been recorded. So far there is no indication of pottery production in the region. The nearest major production sites are at Malton and in the Foulness Valley, though a short lived kiln site was discovered at Lockington, in the Hull Valley, in 1958 (Lloyd 1968). At Easington what were thought to be the bases of kilns may relate to the production of pottery (WYAS 2007). Surprisingly, there are very few references to ceramic building material which are limited to a few fragments found during a watching brief at Long Riston and a stamped legionary tile at Leven (Humberside SMR No. 1118).

### Other Artefacts

A number of records refer to other artefacts from the Roman period. These include brooches, querns, a bronze figure of Mercury from Easington and deposits described as middens. The Humberside SMR contains a record relating to a fragment of a possible Roman sword found in Great Hatfield, however the current whereabouts of the artefact is presently unknown (Humberside SMR No. 2832). The distribution of these finds is shown in Figure 4. As with the coin and pottery distributions there does appear to be a greater frequency of finds towards the coast, Hull valley, and Humber foreshore. Except, that is, for the distribution of querns, which appear to be concentrated in the south-east corner of Holderness.

One of the more frequently recorded artefacts were brooches. These were found around Paull, Kilnsea and, Easington, as well as other areas. One of these, a dragonsque brooch with dark green-brown and red enamel, was recorded as being recovered from the surface of a kitchen midden, and dated to *c.* AD 150 (Clark 1935).

### Evidence for Settlement

The evidence discussed above refers to the distribution of Roman artefacts. Clearly sites which produce quantities of pottery, and other finds, are likely to indicate occupation, however, only a few settlement sites have been identified and even less have been excavated. The location of these sites are shown in Figure 5. The most recent excavation of a settlement site took place at Easington in 2003/4 and uncovered evidence of occupation from the late Iron Age to the second, and possibly, third centuries AD (WYAS 2007). A number of enclosures associated with the Iron Age, the Iron Age/Roman transition, and the Roman period were uncovered. Pottery, coins, animal bone, a head stud brooch, a human burial, cremation remains, a horse burial, what was thought to be a kiln base, fragments of a glass bangle, and part of bridle cheek-piece, as well as evidence for a number of round houses were discovered. The dating of this material suggests that the Romano-British element of the site was established at the end of the first century. Sheppard records that a number of artefacts were recovered from "trenches of dark earth" in 1875 (Sheppard 1912), and other excavations which suggest occupation around Easington were undertaken in the 1960s and 1980s. The 1992 excavation at Leven uncovered two occupation sites (Evans and Steedman 1997). The first of these dated from the second century and the second from the fourth and fifth centuries. At Ulrome, south of Barmston, ditches containing Roman pottery and coins were revealed by coastal erosion and may indicate the remains of a settlement site.

### Aerial Photographic Evidence

Figure 6 shows the distribution of cropmark sites identified by aerial photography contained in the NMR. There are now numerous sites of potential Roman activity, and a search through the database has revealed over fifty sites which interpreters have identified as being Prehistoric and/or Roman, based on their morphology. An examination of the distribution of these sites shows that the vast majority of the cropmarks occur close to areas of alluvium. To determine whether this was a true reflection of the





Fig. 3. The Distribution of Roman pottery in Holderness



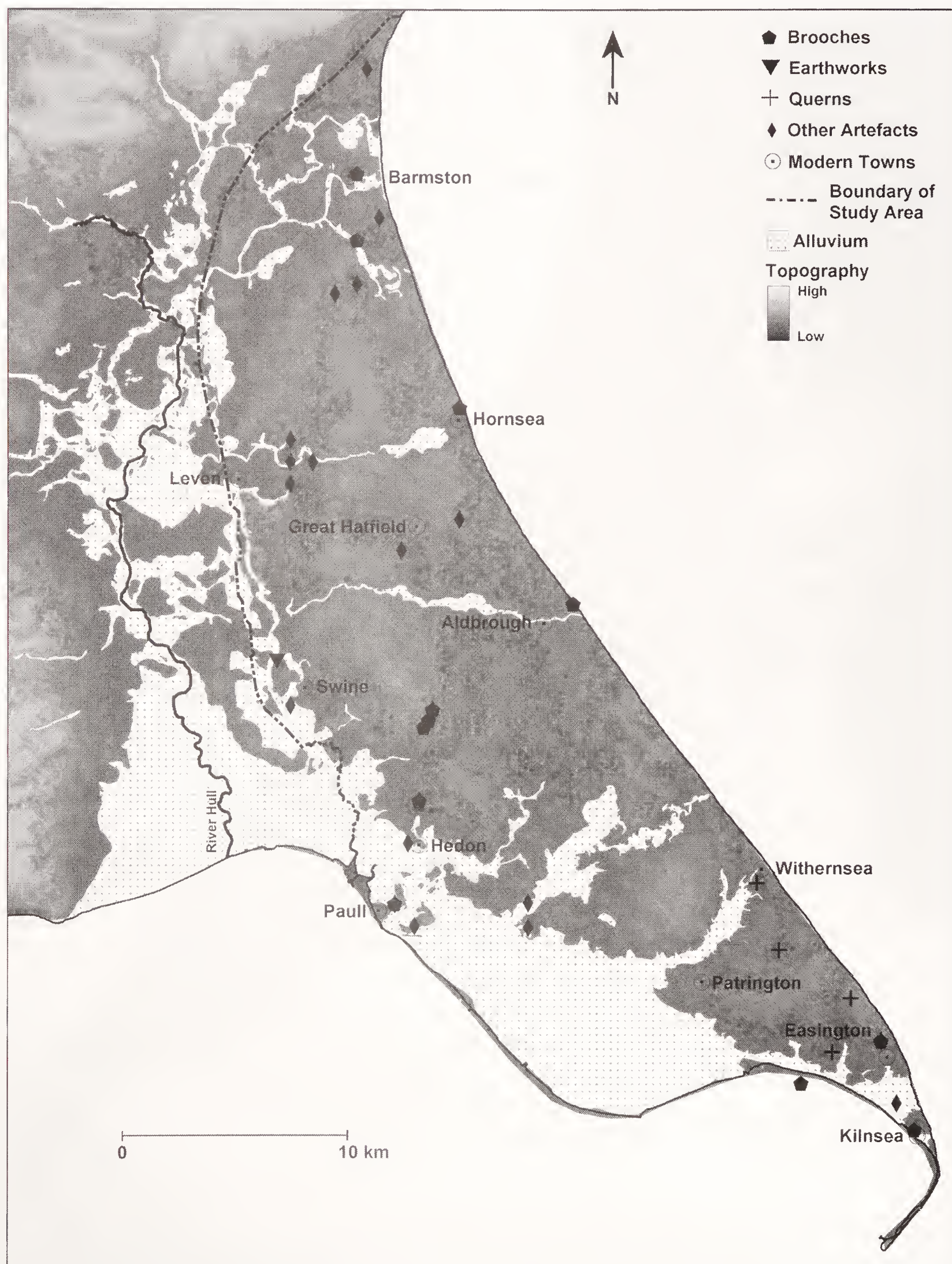


Fig. 4. The Distribution of other Roman artefacts in Holderness



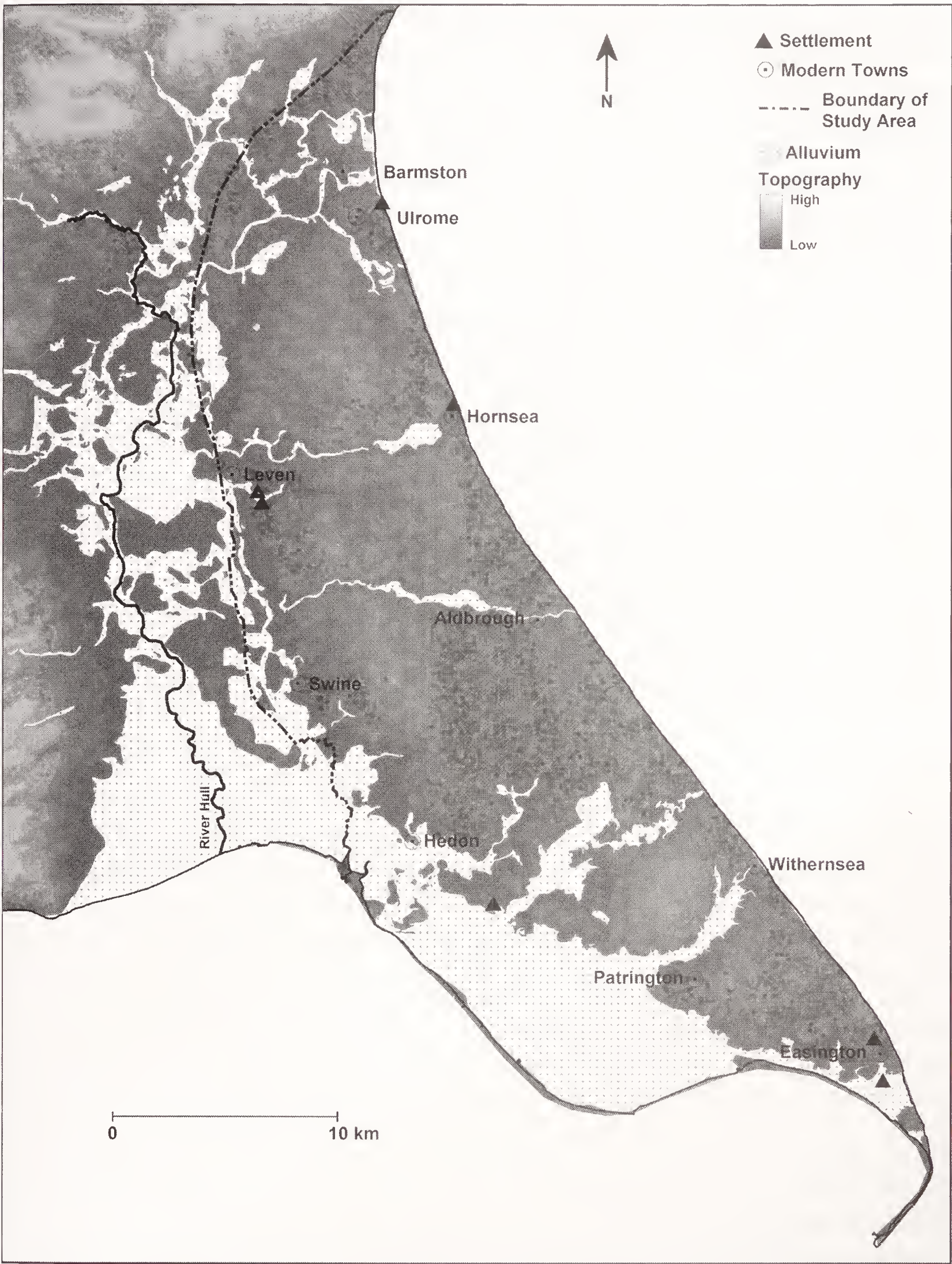


Fig. 5. The Distribution of Roman Settlement Sites in Holderness



distribution and not an effect of the underlying soil, a number of other cropmarks identified by aerial photography, which had not been attributed to any period, were added to the distribution and are indicated by stars. The source of these additional photographs were the NMR and Loughlin and Miller (1979). The latter includes earlier pictures from sources such as the RAF taken in the 1940s. It can still be seen that the cropmark distribution remains biased towards the areas of alluvium, but there are more cropmark sites well away from these areas, indicating that the occurrence is unlikely to be affected by the soil type alone. Aerial photographs showing cropmarks attributed to other periods and/or known features were not included.

A record in the Humberside SMR suggests the presence of a length of Roman road, which can be seen as soil marks on aerial photographs (Humberside SMR No. 1007). However, there is no indication that this has been investigated. It is worth noting that a projection of the line of the section of road shown in Figure 6 joins the lower Hull valley with Bridlington, passing close to the known occupation site at Leven.

There are over one hundred records relating to cropmark sites in the area shown on Figure 6. The proximity of some of these sites suggests that, in some areas, the cropmarks may actually be of related sites. There are also instances where it is highly probable that older photographs show the same cropmark site as the more recent photographs taken by English Heritage. It is likely that the cropmark sites actually represent a wide range of periods from the Prehistoric to Roman, as well as potentially later dates. However, they appear to reinforce the argument that Holderness was extensively settled during the Roman period.

## DISCUSSION

Figure 7 displays the locations of all the artefactual evidence. The distribution of material towards the present coast, the Humber foreshore and Hull valley is very clear. When the location of the artefacts is compared to the topography of Holderness it is seen that they occur predominantly on land which is low lying, close to areas of alluvium and watercourses. In South Holderness and towards the Hull valley these locations would allow ready access to the River Humber. This would suggest that watercourses may have been an important means of access to Holderness and were exploited by the local inhabitants, possibly for trade. Further evidence may be seen at Barmston, Hornsea, Aldbrough, Withernsea and Easington where there appear to be concentrations of artefacts at the end of the stream channels which run between the coast and the rivers Hull and Humber. The distribution of the cropmark sites shown in Figure 6 shows a similar pattern. As mentioned above, there is increasing evidence from the Hull valley demonstrating that there were areas of alluvium capable of supporting activity during the Roman period. Along the River Hull it is believed that this may have involved animal husbandry and again the use of the river as a means of transport (Didsbury 1990). There is not enough evidence to determine what form the activity in Holderness took, however, no evidence of industrial activity is recorded. Therefore, it may be reasonable to suggest that subsistence here was based on agriculture in a similar way to the Hull valley, a hypothesis which seems to be supported by the presence of a number of querns in the south east of the region, which may indicate crop processing.



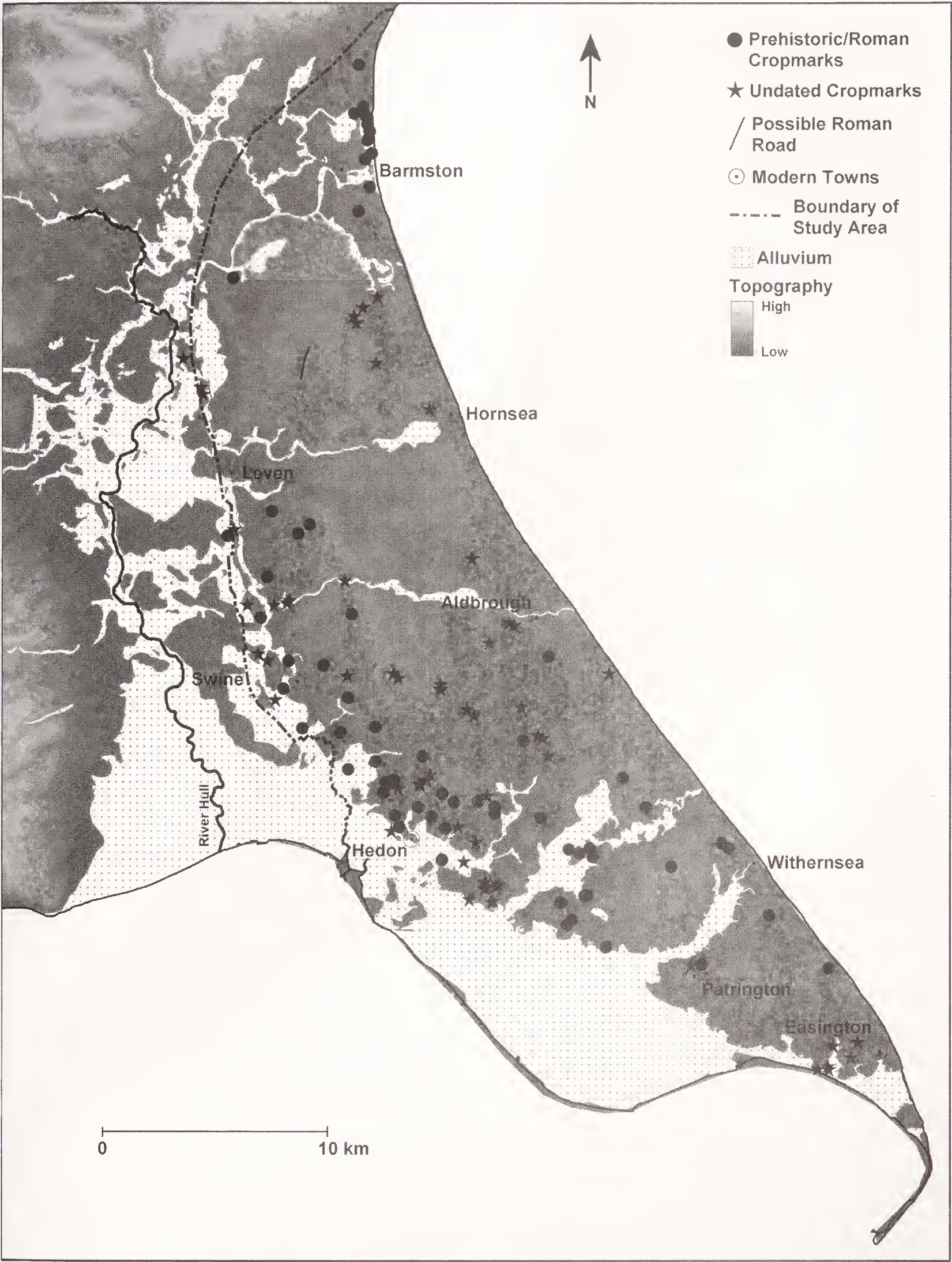


Fig. 6. The Distribution of cropmarks identified by aerial photography



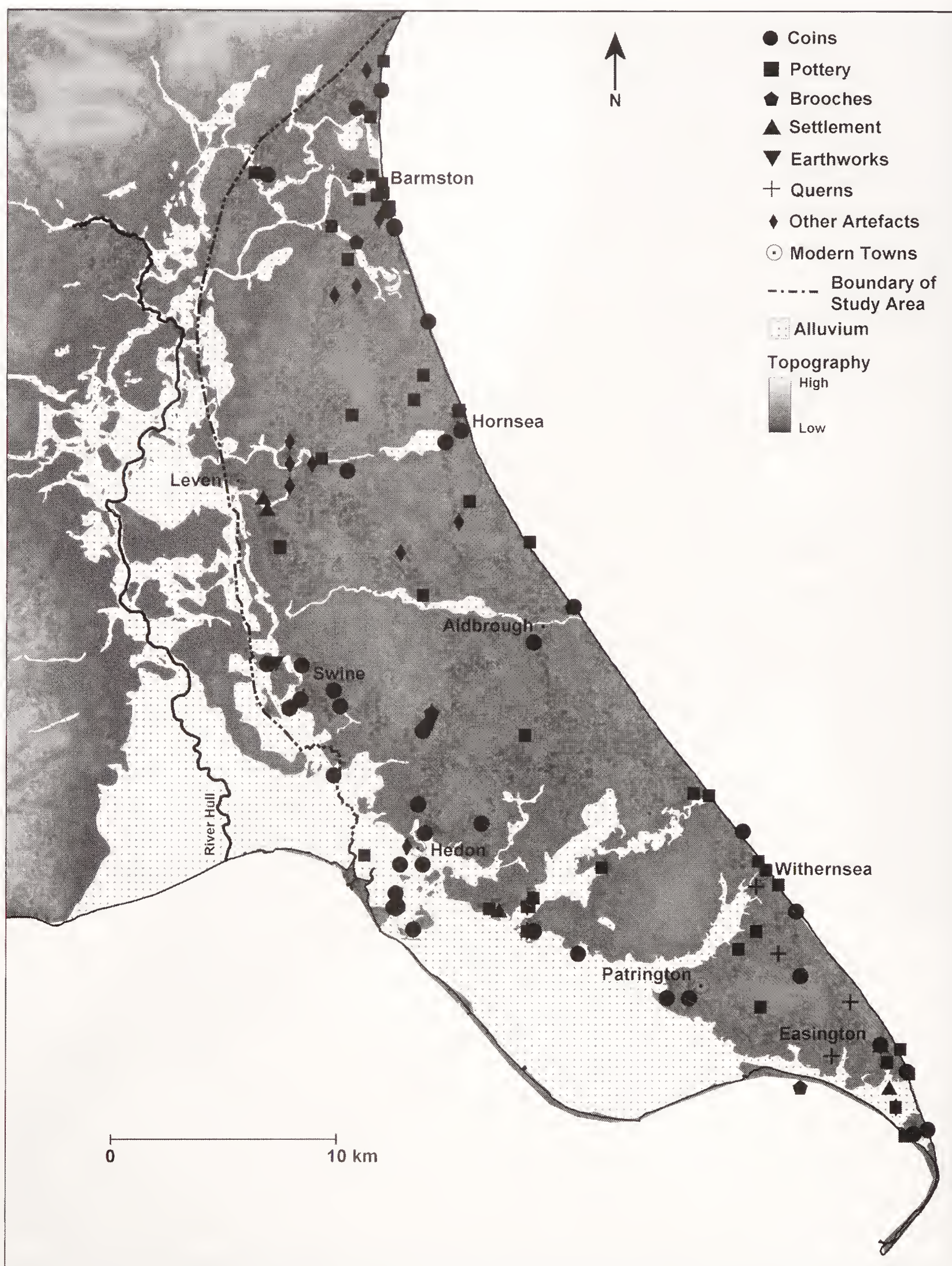


Fig. 7. The Distribution of all Roman artefacts in Holderness



Though the evidence shows that activity was taking place near the areas of alluvium, it is not clear if, or how far, the activity extended on to it. As mentioned in the introduction, there has been a contraction of the marine conditions since the River Humber reached its maximum lateral level c. 3500 years BP (Van de Noort and Ellis 1995). The result of this was the production of areas of alluvium which were no longer under water and therefore potentially suitable for occupation and Peter Didsbury has shown that this was occurring in the lower Hull valley by the Roman period (Didsbury 1990). Therefore, it is reasonable to assume that there were areas of alluvium in South Holderness which were similarly above sea level and capable of being exploited, however there is presently no evidence to support this. In other areas of the Humber basin such as Adlingfleet, the evidence suggests that there were two phases of activity separated by a flood event. The initial activity took place on the alluvial clay and silt close to the River Trent in the early second century. The site then experienced a flood event in c. AD230 which buried the site under a layer of alluvium. The second phase of activity occurred later in the Roman period further from the river (Fenwick *et al.* 1998). This site, as well as those at Faxfleet and South Ferriby, were also subjected to a further marine transgression in the late Roman or post Roman period which left the archaeology buried by up to 1m of alluvium (Fenwick *et al.* 1998). Therefore, it is likely that similar sites in South Holderness would have suffered the same fate. As a result of this, and later sea level changes, any Roman archaeology in the alluvium will be buried to a considerable depth. A fragment of Roman greyware which was recovered from the alluvium near Paull at a depth of 1.5 m may demonstrate this.

The relationship between the occurrence of activity and the landscape in Holderness appears to be generally similar to the Foulness Valley, which is adjacent to the River Humber on the west side of the Yorkshire Wolds. Work by Halkon and Millett has shown that activity during the Roman period was taking place on low rises and ridges of better draining sandy soils, which were close to water courses (Halkon and Millett 1999). This site distribution further emphasises the importance of water-borne transport during the Roman period in the Humber region as it had done in the Bronze Age (Wright 1990) and the Iron Age (Millett and McGrail 1987; Halkon 1997).

There is at present insufficient evidence to draw any firm conclusions as to changes in the level or pattern of activity during this period. It is worth noting however, that when a comparison of the distribution of early and late Roman artefacts was carried out, no significant differences were observed. The date range of the artefacts does suggest activity throughout the period. The presence of a first century BC Republican denarius (Radley 1967) and four coins from Cyrene dated to the second century BC (Clark 1935) indicates the potential for established contact, and trade, between the inhabitants of Holderness and other parts of the Roman Empire, before the arrival of the Legions in Yorkshire in c. AD 70/71, and equates with the finds of Iron Age coins elsewhere in the region (May 1992).

The archaeological evidence discussed above does not provide any indication to the presence of Roman military units. However, in the fourth century the Saxon shore forts were constructed along the east and south coasts of England. The continuation of this coastal defence system is seen in North Yorkshire in a series of



signal stations. Unfortunately, rapid erosion of the Holderness coast has removed all trace of any military buildings which may have been constructed along it. The result is an extremely unlikely proposition that Roman military strategy would leave this area of eastern Yorkshire unprotected. It is believed that the strategy for the defence of this section of coastline did include a continuation of the line of signal stations, which extended beyond the Humber to join with the Saxon shore forts (Whitwell 1989). But with the loss of the land where these were constructed, evidence for a military presence would need to be identified from sites further inland. The village of Aldbrough is the only place-name in Holderness which could potentially indicate that a defensive or military structure was present in the area. The "brough" place-name has been associated with the Old English word *burh* for "fortification" (Smith 1937). It may be of significance because there are a number of sites containing the "brough" or "borough" place-name such as, Brough-on-Humber (*Petuaria*), Boroughbridge and Brough by Bainbridge (*Virosidum*) where Roman forts are known. One place where evidence of military activity in Holderness may be found is at *Petuaria*. Situated on the North bank of the River Humber, it has been suggested that elements of the *classis Britannica* were stationed here until the late fourth century (Wacher 1995). Whitwell has argued that *Petuaria* was too far inland for the base not to have worked in conjunction with older signal stations constructed at the mouth of the Humber (Whitwell 1988). The harbour at *Petuaria* appears to have silted up and gone out of use by the late fourth century, a time which coincides with the construction of the signal stations in North Yorkshire (Whitwell 1989). This potentially indicates that a change in military strategy was necessary for protecting this stretch of coastline. Before c. AD 370 this involved the *Classis Britannica* based at *Petuaria* but would later need to rely solely on land based forces occupying military buildings. However, it has been suggested that a harbour may have existed in Bridlington Bay (Ramm 1978). If this is the case, then the role of any naval elements in the defence of the coastline, and where they were based, would require a re-assessment.

Although much more work needs to be undertaken in order to gain a better understanding of Holderness during the Roman period, it is clear that it is no longer an archaeological void. The area around Easington has produced a wide range of archaeological evidence which has been recorded regularly since AD 1875, and is clearly in need of a sharper focus. Before the most recent excavation revealed clear settlement evidence from the late Iron Age to early Roman period the area had previously produced significant quantities of pottery, numerous coins, a bronze statue, brooches, middens of oyster shells, and ditches containing Roman artefacts all suggesting activity from the first to fourth centuries AD. The most recent excavation at Easington, mentioned above, adds further evidence to this list, including a human burial and the intriguing discovery of a complete horse skeleton which was dated to the early Roman period (WYAS 2007). This evidence suggests that the settlement activity in the area was extensive and significant, and as such important in developing an understanding of Roman Holderness.

## CONCLUSIONS

In conclusion, there is considerable evidence for activity in Holderness throughout



the Roman period, though not yet in sufficient detail to allow a clear understanding of its nature and scale. Although it poses more questions than it answers this evidence does provide a glimpse of the potential quantity of Roman archaeology yet to be discovered. The amount of archaeological evidence appears to be quite high and distributed widely. Although there is more later Roman period material, it is not possible to assess in which centuries the activity was at its highest level, either for Holderness as a whole or any site within the region. The distribution of the evidence appears to suggest that this activity was concentrated along the present east coast, the Humber foreshore and towards the Hull valley. Therefore, it is probable that contact with the sea and River Humber played an important role in the life of the inhabitants of Holderness. It may well prove that activity along the east coast will be the most difficult to interpret. The distance of these sites from the Roman coastline is unknown because of the amount the coast has eroded, so exploring the relationship between the two will be problematic.

The means of subsistence of the Romano-British population of Holderness is unclear. The only evidence so far for any industrial material or remains is the possible kiln base at Easington. This would suggest that an agricultural means of subsistence is the more likely option. As for wealth and prosperity, there are a few artefacts, such as gold coins, which suggest that the activity produced or required a certain degree of wealth. However, the high status buildings etc. associated with the members of the society who would have accumulated this wealth have not been identified.

The evidence currently available provides a tantalising insight into the possibilities of Roman Holderness. To understand the region better a programme of further work is needed which should include both desktop and field archaeology. In the former a detailed examination of the aerial photographic evidence is necessary in order to identify possible high value sites as well as exploring any potential correlation between the occurrence of Roman surface finds and cropmark sites. Potential sites should be investigated, initially, by a combination of geophysical survey and fieldwalking, then latterly by excavation. Based on the current evidence, Swine, Hedon and Paull, Ryehill and Keyingham, Patrington, Kilnsea and Easington, Withernsea, Hornsea, Barmston and Ulrome, are areas which should be among the first to benefit from this programme. The programme should also attempt to identify other sites which would benefit from geophysical survey and fieldwalking in order to advance the understanding of Roman Holderness by covering a greater area of the region. The programme needs to include an ongoing review of the evidence to assess the sites in order to identify and/or protect the most important examples and most urgently those at risk from the fast eroding coastline.

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## CHARLES HOWARD, THIRD EARL OF CARLISLE (1669-1738): GATHERING UP THE FRAGMENTS\*

*By* Quentin Harcourt Wilson

*This article demonstrates how our present understanding of the contribution of Charles Howard, third Earl of Carlisle (1669-1738) to the life of his own generation is amplified by considering the small but significant number of literary texts associated with him held in the archives at Castle Howard, and their relationship with other contemporary documents.*

Ministers of the Crown leaving high office for further service may often have welcomed the comparative shadow of political afterlife. Few, however, have experienced the contrast to the degree attending Charles Howard, third Earl of Carlisle, twice First Commissioner of the Treasury. Having served in this capacity under William III and George I before the office attained its later importance, this is not, perhaps, so remarkable. However, serving immediately before Walpole's tenure and development of the office, it seems unfortunate that greater attention has not been given to a statesman who served conscientiously when much was at stake. Carlisle's reputation now depends largely on the magnificent country seat he built at Castle Howard. Much is owed to those who have written about Castle Howard, and to Charles Saumarez Smith in particular,<sup>1</sup> who have drawn attention to the literary

\* Thanks are due to the Hon Simon Howard and Trustees of Castle Howard for permission to reproduce documents in their archives, and to Dr Christopher Ridgway and Miss Alison Brisby for help in consulting manuscripts in their care. Thanks are also due to Dr J. Donovan and Professor J. Barrell of the University of York for their guidance and encouragement whilst I engaged in this research.

<sup>1</sup> Charles Saumarez Smith, 'Charles Howard third Earl of Carlisle and the Architecture of Castle Howard' (unpublished doctoral thesis, University of London, 1986), and *The Building of Castle Howard* (London, 1997), [hereafter referred to as BCH]. Susan Gordon, 'The Iconography and Mythology of the Eighteenth-Century Landscape Garden' (unpublished doctoral thesis, University of Bristol, 1999). Dawn Lancaster, 'An Archaeology of the House and Garden' (unpublished master's dissertation, University of York, 2003). Ruth Larsen, 'Dynastic Domesticity: The Role of Elite Women in the Yorkshire County House 1685-1858' (unpublished doctoral thesis, University of York, 2003). Quentin H Wilson, 'The Literary Remains of Charles Howard, third Earl of Carlisle, 1669-1738', 2 vols with separate appendix (unpublished doctoral thesis, University of York, 2006). Kerry Downes, Christopher Ridgway and the late Giles Worsley, amongst others, have written authoritatively on Castle Howard, but without invoking these texts.

manuscripts associated with the third Earl preserved in the archives.<sup>2</sup> In the context of other archive materials, some available in various Historical Manuscripts Commission publications, these documents give reason to believe Carlisle continued to contribute significantly to the politics of his age. This article offers, not exaggerated claims, but a resumé of his life, indicating where these documents may inform our appreciation of that contribution.

Charles Howard, third Earl of Carlisle, was born in 1669, but no details survive about the exact date or place, nor do baptism records afford any clues. It is understood that he grew up mainly at Naworth, the family seat near Carlisle. He was the son of Edward Howard (1646-1692), who had sat as a Whig MP until he succeeded to the title in 1685, and had been Lord Lieutenant for Cumberland and Governor of Carlisle. Thomas Story, a contemporary Quaker writer,<sup>3</sup> confirms that Charles was brought up in the Border country in close contact with his grandfather, the first Earl, aware of family responsibilities in local and national politics.

Possibly educated at Morpeth,<sup>4</sup> from which he took his courtesy title, Charles completed his education by undertaking the Grand Tour in the late autumn of 1688, having married Lady Anne Capel on 25 July of that year. As Lady Anne was only thirteen it seems possible that the match was made to cement a political alliance as well as for dynastic reasons. (The bride's father, the first Earl of Essex of that creation, had died in the Tower after being implicated in the Rye House plot, betrayed with Russell and Sidney on the tainted evidence of William Howard, Lord Escrick, the second Earl of Carlisle's uncle.) The marriage of Essex's only daughter

<sup>2</sup> Carlisle's 'Literary and other Mss' are catalogued as CH J8/35/: 1. Book of Notes on Italy c.1692; 2. Book of notes on the principal families of Rome. [In Italian]; 3. "Observations upon meddailes in French and English". Notebook; 4. "Remarks out of several books in Latin, French and English". Notebook; 5. Poem: "Reason a goddess, clear and bright"; 6. "A milk white heifer, darling of my herd" and other poems. Notebook, 20 pages and 1 loose leaf with corrections; 7. Poem: "A riddle made upon the game called Quadrille". 2 sheets of paper; 8. Poem: "The introduction to an epistle from Antiochus to Stratonias"; 9. Charles, 3rd Earl of Carlisle's advice to his son; 10. Charles, 3rd Earl of Carlisle's advice to his son. (2nd copy); 11. Draft of an inscription to be carved on the Pyramid; 12. Draft of inscriptions to be painted by William Aikman on the portraits of the 1st, 2nd and 3rd Earls of Carlisle; 13. Title page of "A book of coates of armes" by Charles Carlisle, 1699; 14. Copy of a sermon by the Earl of Carlisle on St. Matthew ch 6 v 16; 15-17. "That a supreme being has created this universe..." An essay on God and His prophets. Fair copy and two drafts; 18. A poem by Lady Anne Irwin, entitled "The Seven Wise Men of England"; 19. Draft inscription for the obelisk. Texts available only in Castle Howard Archives are identified by a reference, beginning CH. Texts transcribed in the *Historical Manuscripts Commission* Report 42 (HMSO, 1897) are identified as 'HMC, Carlisle Papers' with page numbers. (Other collections are similarly identified.)

<sup>3</sup> The account in *BCH* p.1. & endnote 2. *A Journal of the Life of Thomas Story* (Newcastle, 1747) [hereafter referred to as 'Story's Journal'] p.617: 'When the present Earl was a Boy, he was at that City [i.e. Carlisle] with his grandfather.'

<sup>4</sup> *BCH*, p.1, quoting J. Hodgson, *A History of Northumberland*, (Newcastle, 1832), II, ii, p.402.



to the future third Earl of Carlisle might be considered a reaffirmation of Whig loyalties by the Carlisle branch of the Howard family when William of Orange was preparing to intervene in British affairs. Although the second Earl was not a signatory to the letter inviting William to England, he was committed to a change in regime, offering his service to William on 10 July and taking part in the government of the Kingdom between James II's departure and the assumption of government by the Prince of Orange.<sup>5</sup> The considerable risk in the event of failure to the lives and estates of those attempting revolution may possibly account for sending the young bridegroom on his Grand Tour in autumn 1688 – hardly an ideal time of year to undertake such a journey under more normal circumstances.

Where Lord Morpeth travelled on his Grand Tour can only be partially known. Though certainly it made sense to travel through Holland and the German principalities, we have little evidence for this part of his journey.<sup>6</sup> We do, however, possess quite detailed accounts of his time in Italy. The four books of notes: *Notes on Italy*, *Notes on the Principal Families of Rome*, *Observations upon Meddails*, and *Remarks out of several Books*, (CH J8/35/1-4) date from this period – two almost certainly from 1690 – forming a valuable record of what a young nobleman was expected to see and note at that time. Copies of four letters in French are incorporated in the *Remarks*, suggesting that Lord Morpeth may have formed a close attachment to a young woman around the turn of the year 1690. Whether or not these letters have a direct bearing on any later relationship with Lady Anne Popham can be matter only for speculation – but equally the possibility cannot be dismissed. As Saumarez Smith points out, Morpeth signed a Visitors' Book at Padua on 'ye first day of ye year 1690', a month or so before Alexander Popham himself.<sup>7</sup> (Morpeth and Popham may have been acquainted: their grandfathers served in Cromwell's Upper House, and supported the Restoration afterwards. Popham was the wealthy squire of Littlecote in Wiltshire: his marriage to Lady Anne, a daughter of the recently ennobled Ralph Montagu, had also confirmed a political alliance.) These letters – apparently written by '*une amante*' to her lover – describe a brief encounter in which, as they part, she asks him to send some verses he had shown her on the grounds that '*Je les aime comme si vous les aviez faits pour moy, parce que celle, pour qui ils sont, ne si connoit pas assez pour en faire l'estime, que j'enfais*'.<sup>8</sup> There are, of course, several possible explanations apart from a literal transcription

<sup>5</sup> Robert Beddard, *A Kingdom without a King: The Journal of the Provisional Government in the Revolution of 1688* (Oxford, 1988), pp. 92-8, 122, 168 & 201.

<sup>6</sup> The warrants 17 November 1688: Calendar State Papers Domestic 1687-1689, p.356, and HMC, Finch Mss Vol. III., p.2., establish the dates of the Grand Tour, suggesting its probable route.

<sup>7</sup> *BCH*, p.5, (quoting H. F. Brown, *Inglese e Scozzesi all' Università di Padova* (Venice, 1921), p.36). It is, however, unclear whether this was a City or University Register.

<sup>8</sup> 'I love them as if you had composed them for me, since she to whom they belong does not have the experience to value them as I do. Farewell.'

of letters actually received. Nevertheless, whatever their origin, their survival suggests the Tour offered an introduction to courtesies which marriage had so far done little to encourage, and which possibly affected future relationships. The remaining notebooks show Morpeth's grasp of French, his interest in numismatics, and trace his progress in Italian as he records the convoluted structures of the Italian nobility and the Roman Curia.

Returning in February 1691, Charles Howard represented Morpeth in the House of Commons until succeeding to the estate and title on 23 April 1692. In October 1694, Henry, a son and heir was born, and daughters, Mary and Anne, were born in 1695 and 1697 respectively. The year 1696 saw the death of Carlisle's mother, Elizabeth née Uvedale, and widow of Sir William Berkeley, and her burial with the second Earl at Wickham in Hampshire. Carlisle's paternal grandmother, however, survived well into the new century, being buried in York Minster on 4 September 1703.<sup>9</sup> From 1695, when he began to spend more time in London, Carlisle took an active interest in politics. As Governor of Carlisle from 1 March 1693 and Lord Lieutenant of Cumberland and Westmorland from 28 June 1694, he sought to extend his influence into the neighbouring county of Westmorland in the parliamentary elections of 1695. He was primarily concerned to exclude the Grahme family candidate from parliament – perfectly understandable in the light of that family's known sympathies with the exiled James II. Nevertheless, the vigour with which this parliamentary campaign was fought should not blind the historian to the essential 'country cousin' relationship between the Musgraves, Grahmes, Lowthers and Howards, nor to Carlisle's humanitarian instincts when acting under orders from London in taking known Jacobite sympathizers into protective custody.<sup>10</sup>

Tensions created by Jacobite loyalties assumed greater proportions in the scandal surrounding Carlisle's aunt and her husband, Sir John Fenwick. He had married Lady Mary, a fellow-Catholic and close acquaintance of the Duchess of Norfolk, and took part in an unsuccessful Jacobite assassination plot in 1696 which resulted in his attainder and execution. After the Bill of Attainder had been narrowly passed, Carlisle produced mischievous letters from Monmouth sent to Fenwick through Lady Mary and the Duchess, cynically suggesting he buy his life by implicating Marlborough and Shrewsbury in the plot. This revelation might have secured clemency for Fenwick.

<sup>9</sup> Robert H. Skait, *Register of Burials in York Minster* (York, 1870), p.47, Entry 137. Skait's 'biographical notice' mistakenly identified this entry with Carlisle's mother, who died in 1696.

<sup>10</sup> See HMC, Downshire Mss, Vol. I., Pt II., p.565, for an example of the complex relationships between Carlisle and Sir Christopher Musgrave over the latter's appointment as Deputy Lord Lieutenant. See also a letter from Carlisle to Sir Daniel Fleming, 17 March 1695 (Cumbria Record Office [Kendal] WD/RV/Box 25) where Carlisle was unwilling to put otherwise loyal Catholic neighbours to greater inconvenience than necessary – a leniency for which he was required to give account to London.



In the event Sir John died with dignity, refusing to involve the innocent in the debacle, with the tangential involvement of Lady Mary and the Duchess subsumed in natural sympathy for distressed relatives.<sup>11</sup>

There seem to have been few points of contact between Carlisle and his father beyond sharing an interest in the theatre. *A Compleat Collection of Mr. D'Urfey's Songs and Odes*, 1687, and *Bussy D'Ambois*, 1691, are dedicated to Edward Howard, second Earl of Carlisle, and on 28 March 1690 D'Urfey's name appears as a servant of Carlisle's in a list of Parliamentary protections entered in the office of the sheriff of Middlesex.<sup>12</sup> Interest in the theatre continued in the third Earl's acquisition of a significant number of works for his library<sup>13</sup> by John Dryden, his kinsman Sir Robert Howard, and John Vanbrugh, the latter known as a playwright and fellow-member of the Kit-Cat Club before turning his talents to architecture.

After the Fenwick affair, difficulties were acknowledged in Carlisle's marriage. These emerged in 1698, a topic of informed comment in London when Carlisle's wife 'surpriz'd her husband with Lady Anne Popham at the old Lady Howard's lodgings'.<sup>14</sup> Nevertheless some degree of reconciliation was achieved, for further children were to be born: Catherine in 1699; Elizabeth in 1701; Harriet in 1703; and a second son, Charles, in 1705.<sup>15</sup> Of these, only Elizabeth and Charles grew to adulthood, Catherine being buried in York Minster in March 1704.<sup>16</sup> After 1705 Lady Carlisle appears to have withdrawn permanently, first to Cassiobury, her family seat, then Richmond and finally Twickenham.<sup>17</sup>

<sup>11</sup> Macaulay gives the Fenwick affair extended treatment in *The History of England from the Accession of James II*, 5 vols (reprinted London, 1986), IV, pp.411-587, pp. 544-87 being particularly detailed. The papers from Monmouth to Fenwick conveyed through the Duchess of Norfolk are discussed on pp. 575-7 and 582-4.

<sup>12</sup> HMC Thirteenth Report, Appendix, Part V, (The Manuscripts of the House of Lords, 1690-1691), 1892, p.12, quoted in Cyrus Lawrence Day, *The Songs of Thomas D'Urfey*, (Cambridge Mass, 1933), p.9.

<sup>13</sup> A Catalogue of the Rt Honble Charles Earl of Carlisle's Books in the Library in his Lsps House in Soho Square Taken in March 1698 (CH H2/3/8).

<sup>14</sup> *The London Diaries of William Nicolson, Bishop of Carlisle, 1702-1718*, ed. Clyve Jones and Geoffrey Holmes (Oxford, 1985), p.253. Entry for 14 December 1704. (See also entry for 8 January 1704/5). The allegation about the involvement of Lady Anne Popham is made in a letter of 18 June 1698, from James Vernon to the Duke of Shrewsbury in *Letters Illustrative of the Reign of William III from 1696-1708 Addressed to the Duke of Shrewsbury by James Vernon, Secretary of State*, ed G. P. R. James, 3 vols (London, 1841), II, p.108.

<sup>15</sup> Larsen, 'Dynastic Domesticity', p. 287, gives a detailed Family Tree.

<sup>16</sup> *Register of Burials at York Minster*, p. 47, Entry 138. Skaite spells the name 'Katherine', adding 'This lady is not mentioned in the Peerage.'

<sup>17</sup> Lady Carlisle's residence at Cassiobury is suggested by Carlisle's letters to Nicholas Ridley, his London agent. Though the date of these letters does not specify the year, the presumed ages of the children mentioned in them suggest c.1710. Lady Carlisle's later residence in Twickenham is confirmed in letters from the Duchess of Somerset to Lady Giffard in *Martha, Lady Giffard: Her Life and Correspondence*, ed Julia G. Longe, (London, 1911), pp. 326-9.



Carlisle's political career burgeoned during these years. Appointed a Gentleman of the King's Bedchamber on 23 June 1700, he threw himself into the keen political fray that produced the parliament assembling in February 1701.<sup>18</sup> Macky's brief account of Carlisle assigns him a key role in the process by which that Parliament was dissolved in November 1701 resulting in new elections which effectively brought Whig politicians into greater prominence:

Charles Howard, Earl of Carlisle, Is a Branch of the noble Family of the Howards (Dukes of Norfolk) was one of the Gentlemen of the Bed-Chamber to King William; and under that Pretence, went over to Holland, the last Year of the King's Life, and solicited the Dissolution of that Parliament, which impeached the Partition Treaty, and obtained it of the King. He was the great Instrument of procuring, from the Country, the Addresses, upon the French King's declaring the Prince of Wales, and was made first Commissioner of the Treasury. On the Queen's Accession to the Throne, he was dismissed from his Employments at Court.<sup>19</sup>

Carlisle became First Commissioner of the Treasury on 30 December 1701 until the King's death on 6 May 1702, and Earl Marshal<sup>20</sup> on the death of the Duke of Norfolk from 8 May 1701 until 26 August 1706. Carlisle could scarcely have expected this office, for the Duke of Norfolk had died quite unexpectedly. The item catalogued at CH J8/35/13 as the 'Title page of *A Book of Coates of Armes* by Charles Carlisle 1699' – although containing nothing else – is a reminder of his activities at the period, particularly in organising the ceremonial for Queen Anne's Coronation, one of his more onerous duties as Earl Marshal.<sup>21</sup> The office could hardly have fallen to anyone better-qualified: his interest in heraldry cannot be doubted, given the number of works dedicated to the subject in his library. The normal work of the

<sup>18</sup> *BCH*, pp.13-15, quoting the Grahme correspondence in the Levens Mss and the Rydal Mss held in the Cumbria County Record Office at Kendal and the Lonsdale correspondence held in the Cumbria County Record Office at Carlisle. (Some papers have subsequently been reclassified.) Saumarez-Smith is informative about political manoeuvring between 1700-1702: *BCH*, pp.12-17.

<sup>19</sup> John Macky, *Characters of the Court of Great Britain, published as part of Memoirs of the Secret Service of John Macky, Esq during the reigns of King William, Queen Anne and King George I...* (London, 1733), p.59 [hereafter 'Macky, *Characters*']. This differs from Macaulay, who ascribes the decision to a Privy Council held 7 November, *History*, V, p.219.

<sup>20</sup> Carlisle always described himself as 'Earl Marshal'. Later references to him as 'Deputy Earl Marshal' may prove *ex post facto* rationalisation. Would John Anstis write his *Letter to a Peer concerning the Honour of Earl-Marshal: Shewing that no Earl-Marshal can be made during the Minority of an Hereditary Earl-Marshal* (London, 1703), unless Carlisle's appointment challenged this?

<sup>21</sup> Two printed papers survive in Carlisle's name concerning the processions for the Coronation on 23 April 1702: *By Charles, Earl of Carlisle, Earl-Marshal of England*; and *The Form of the Proceeding to the Royal Coronation...* Both printed by Edward Jones in the Savoy.



Earl Marshal's office involved the supervision of the College of Heralds, and sitting in judgment over such matters as came within their jurisdiction. In an age when visible expression of rank and privilege was important, etiquette was significant beyond the confines of Court circles. Issues of precedence, and claims to display arms never properly granted were matters of moment, and it was the responsibility of the Earl Marshal and the Court of Chivalry to determine these matters.<sup>22</sup> A common complaint was the improper manner in which unqualified entrepreneurs sought to undertake funeral duties which were the proper perquisites of the Heralds. As Sir Anthony Wagner explains:

An ingenious painter named William Russell had ... set up as a coffin maker and at length undertook to furnish everything relating to funerals, which before had been provided by each respective trade. Thus he became the first Undertaker ... Having made his great invention, Russell hastened to outbid his old colleagues by proposing to the heralds to ensure their frequent use at funerals provided that two heralds would serve at £20 a time. This was thought a good offer and at a Chapter in November 1689 was agreed to, but probably little came of it. Ten years later the heralds were considering prosecuting the undertakers for marshalling funerals.<sup>23</sup>

John Gybbon, as Bluemantle, a pursuivant of the College of Heralds, wrote a tract about the problems faced by his profession, sending it to the Duke of Leeds with a covering letter dated 9 September 1695. In this he complained of 'one Russell, "the funerall-monger," who had conducted the burial of a daughter of Lord Carlisle 'with heralds of his own creation'.<sup>24</sup>

With Carlisle as Earl Marshal, things did not necessarily work out as he might have hoped. For example, for the celebration of Queen Anne's Accession at St Paul's in 1702, the responsibilities were removed from Carlisle as Earl Marshal to the Lord Chamberlain on the grounds that 'for this day only' the Cathedral was regarded as the Queen's Chapel-Royal.<sup>25</sup> Sir Anthony interprets this as part of a general tendency

<sup>22</sup> *Reports of Heraldic Cases in the Court of Chivalry, 1623-1732*, edited by G. D. Squibb. Harleian Society Publications, vol. 107 (London, 1956), pp.75-9 & 98-103. See also Note on the proceedings before Charles, Earl of Carlisle, Earl-Marshal, 27 March 1702 in HMC, Carlisle Papers, p. 10.

<sup>23</sup> Anthony Wagner, *Heralds of England: A History of the Office and College of Arms*, (London, 1967), [Hereafter referred to as 'Wagner, *Heralds*'], pp.302-3.

<sup>24</sup> HMC XI Report VII, Mss of the Duke of Leeds, p.42. Saumarez Smith refers to this in *BCH* p.11. These 'heralds' were Russell's creation - not Carlisle's. The 'daughter' was almost certainly Carlisle's sister Mary (1677-1694): no reference otherwise exists to any daughter he could have fathered to bury as early as 1695.

<sup>25</sup> Wagner, *Heralds*, p.340.

to regard Royal occasions as private rather than public, and therefore subject to the Lord Chamberlain rather than the Earl Marshal: even so, the fact that this became an issue where a decision had to be made and justified means that personal issues cannot be completely irrelevant. Wagner also mentions a rumour that Carlisle accepted £1000 from Sir Henry St George for nominating him Garter King at Arms in March 1703. 'If the charge be true, it is a blot upon the fame of a nobleman whose general reputation was for generosity with his ample wealth and intelligence in his patronage.'<sup>26</sup>

If Carlisle's use of patronage was characteristic of his age, his behaviour in respect of John Vanbrugh and the College of Heralds pushed contemporary tolerance to the very limit. Maybe nominating his friend and architect in June 1703 as Carlisle Herald Extraordinary, and in 1704 as Clarenceaux, brought someone of real ability into the College of Heralds.<sup>27</sup> Nevertheless, Carlisle was using his patronage as Earl Marshal, (as he had already used it as First Commissioner of the Treasury when he appointed him Comptroller of the Board of Works in June 1702) to reward Vanbrugh at no cost to himself. Not only had Vanbrugh no background in heraldry, he had published a play - *Aesop* - in which the Heralds and their office were held up to ridicule. This was an appointment much resented by the College of Heralds,<sup>28</sup> and led to bickering which was only settled by the Queen's intervention.<sup>29</sup> This maintained Carlisle's right under a statute of Charles II to make such a nomination on the one hand –but the providential coming of age of the hereditary Earl Marshal meant that Carlisle would not be able to act in such a high-handed way again. This was not, however, the end of a catalogue of difficulties which Carlisle either inherited or created. According to Wagner:

In July 1704 the Deputy Earl Marshal extended his detailed supervision of the granting of arms to its extreme point when he required that the King of Arms should submit a sketch of the proposed design of arms for his approval before granting them ... Such was the cumulative effect of internal and external difficulties that between November 1704 and June 1707 no grants of arms were made.<sup>30</sup>

Though the *Book of Coates of Armes* can have had nothing directly to do with this episode, that it remains empty reflects a particularly barren and unrewarding episode.

<sup>26</sup> Wagner, *Heralds*, p.326. Contemporary attitudes to patronage differed from ours. Salaries were often irregularly paid, and 'fees and dues' might be the only income derived from office. See later for General Williamson's comments on Carlisle's patronage whilst Constable of the Tower of London.

<sup>27</sup> Kerry Downes, *Sir John Vanbrugh: A Biography*, (London, 1989), p.239.

<sup>28</sup> Anstis, *Letters to a Peer*, illustrates the depth of feeling over Carlisle's behaviour. See also the letters in *The Earl-Marshal Papers at Arundel*, prepared by Francis W. Steer, published by the Harleian Society, vols. 115 & 116 (London, 1964), p.44, items 407-16.

<sup>29</sup> 14 March 1703/4 at a hearing before the Privy Council: Wagner, *Heralds*, p.334.

<sup>30</sup> Wagner, *Heralds*, p.342.



After William III's death on 8 March 1702 and Carlisle's consequent loss of office as First Commissioner on Queen Anne's accession, fourteen years of relative political eclipse ensued under a Tory ministry. However, partial withdrawal from the politics of London did not mean withdrawal from his local, almost hereditary, responsibilities as Lord Lieutenant for the Border region. Nor did exclusion from the highest offices of trust necessarily involve reluctance to serve the Crown elsewhere. (Much about Castle Howard can be understood as an attempt to consolidate this role with its close proximity to York, the traditional location for the former Council of the North, and better command of the Border extremities.) Contemporary attitudes towards national and local service to the Crown – and instancing Carlisle – are illustrated in a letter dated 26 December 1702 to the Earl of Rutland, urging him to reconsider his refusal to serve as Lord Lieutenant and *Custos Rotulorum* for his county. His son-in-law, Sir John Leveson Gower, wrote:

She [Anne] will be Queen of all her subjects, and would have all the parties and distinctions of former reignes ended and buried in hers, and in order to it expects that those whom she employs shall give the first example. Her Majestie's intentions and resolutions are greate, and for the common good, and will your Lordship be the single instrument to obstruct them? Shall it be said my Lord Devonshire, my Lord Carlisle, and others, could forget the affronts and disappointments they had met with, in their several countrys, and that my Lord Rutland alone would not? Will your Lordship give up the command of your country to some other family, when at present it is thought allmost of right to belong to yours? Arguments there are innumerable to perswade you at least to seem to comply and to defer your giving up.<sup>31</sup>

As a further instance of local service, but with national significance, on 10 April 1706 Carlisle was appointed one of the Commissioners for the Treaty for the Act of Union between Scotland and England.

As Queen Anne's preference for Tory ministers excluded Carlisle from anything but local government and influence, these years were much occupied in husbanding his resources to finance the work at Castle Howard, and in re-organising family affairs after the separation from his wife in about 1705. The settlement made on Lady Anne was far from ungenerous: £1000 per annum – which derived from the estate – which attracted a Land Tax of 4s. in the pound, reducing the sum to £800. Much of his correspondence with his London agent, Nicholas Ridley, is concerned with the recovery of jewellery which Lady Essex, his mother-in-law, appeared reluctant to return.<sup>32</sup> Some of these stones were to be sold, suggesting that Carlisle's finances were quite stretched during this period. In an age where gambling was common, Carlisle was more successful than many, and derived, according to Saumarez Smith's investigations into the financing of Castle Howard's construc-

<sup>31</sup> HMC XII Appendix V, Vol. II., Rutland Papers at Belvoir Castle, pp 172-3.

<sup>32</sup> Correspondence between Carlisle and Ridley, CH J8/33/16-19, 25, 26, 33 & 34.

tion, a considerable proportion of his income in the early years of the century from good fortune at the gaming-tables.<sup>33</sup> As a man of his age, the only surprising thing about Carlisle's gambling, perhaps, is his success at it.

In other ways – as we have already seen in the matter of his exploitation of patronage – his behaviour might not always have secured the approval of a later age. Two of his associates in these years were Thomas, Lord Wharton, and his own brother-in-law, Algernon Capel, the second Earl of Essex, described as 'the lewdest young man of the town.'<sup>34</sup> In admittedly a second-hand account, Lady Mary Wortley Montagu is said to have included Carlisle in an escapade of a kind which did much to harm Dolly Walpole's reputation.<sup>35</sup> Briefly, when dining with the Duke of Kingston, (Lady Mary's father), Lord Carlisle and Lord Wharton left the dining-room on spying Lady Mary and her friend Dolly in the garden, and joined them there, whereupon a 'game of high romps ensued'. Though this is told in the context of the 'scrape' that drew Philip, Lord Wharton and Dolly Walpole together, there is a plain implication that whatever was going on between Lady Mary and Lord Carlisle was not beyond reproach. It is not necessary to read enormous significance into one recorded incident – and in any case if Plumb is correct in thinking that this took place in 1706, then Philip, Lord Wharton, would have been only eight years old. That so little can be deduced from slender evidence is only important insofar as Carlisle's semi-autobiographical poem *A Milk-White Heifer* (CH J8/35/6) portrays him as a temporary victim of self-indulgence and moral dissolution. Although he fathered an illegitimate daughter, Carlisle's personal conduct did not excite adverse contemporary comment – indeed, rather the reverse.

Queen Anne's death and the accession of George I did not immediately result in a change in Carlisle's political fortunes. Indeed, drafts of two letters in French survive at Castle Howard<sup>36</sup> in which he complains bitterly to M. de Bothmar and George I about the comparative neglect he and his family had been shown – despite his service as a Regent until George's arrival. In his letter to M. de Bothmar, Carlisle wrote:

*Permettéz moy, neantmoins, de vous représenter, que la raison que vous me donnés, pourquoy le Roy ne trouve pas [pas] bon, de donner a present, aucun[e] marque de sa faveur, ny a moy, ny a ma famille, m'inquiette extremement. Vous trouvés bon de me dire, que le Roy pensera a moy, sur quelque autre occasion; mais qu'il*

<sup>33</sup> Saumarex Smith details Carlisle's income from gambling in relation to his total income in the years 1700-8. *BCH*, pp.72-6.

<sup>34</sup> Quoted by V.G. in *Complete Peerage*, ed. the Hon. Vicary Gibbs, (London, 1913), V, p.146, nb.

<sup>35</sup> Wharncliffe Mss, 439, held at Sheffield Central Library. Letter from Lady Louisa Stuart to Lord Wharncliffe, c. 1738. This is quoted in J. H. Plumb *Sir Robert Walpole: the Making of a Statesman*, 2 vols (London, 1956), I, p.124n.

<sup>36</sup> HMC, Carlisle Papers, pp.13 & 14.



*ne le peut pas faire a cette heure, a cause du nombre de ceux qui pretendant a l'emploi, pour lequel j'ay pris la liberté d'offrir mes services. Il faut que je vous avoüe, Monsieur, que (si je ne suis pas mal informé, qui sont ces Pretendants) je suis fort senciblement touché qu'on m'ait cette responce, j'auray crû, sans vanité, qu'avec plus de justice, on l'auroit pû donner a ces Pretendants; et je ne me seray jamais imaginé, que je pourois estre mis en competition, pour la faveur de nostre bon Roy avec le Duc de Richmond, et my Lord Selkirk. Pour ce qui regarde mon fils, je pris la liberté de vous dire, que pour ne point donner du trouble au Roy, je cederay volontiers (pour cette seule raison) les pretentions que j'avois osé faire pour moy mesme; demandant seulement la grace, qu'il fust receü dans la famille du Prince, a qui il a l'honneur d'estre connu [&].<sup>37</sup>*

Whether these letters had any direct influence, particularly the possible threat to pay court to the Prince of Wales, is unknown, but Carlisle subsequently became First Commissioner of the Treasury once again from 23 May until 11 October 1715. In the build-up to the Jacobite rebellion of 1715 Carlisle was therefore at the centre of national politics, which he left in order to discharge his responsibilities as Lord Lieutenant, commanding the Border militia as they tracked the rebel forces to their final surrender at Preston on Sunday, 13 November 1715. In a letter to Lord Townshend dated 15 November 1715, he describes his part in the aftermath of that action, his acquaintance with Derwentwater and Witherington, and his efforts to persuade them to reveal what they knew in hopes of mercy from the King:

I being particularly well acquainted with my Lord Derwentwater and my Lord Witherington (and they being at this time under great dejection of mind) I thought this might be a proper time to trye if they were disposed to make a confession. I therefore lay'd before them in the best manner I could the little reason they had to expect the King's mercy unless they did some thing very material of this kind

<sup>37</sup> This draft of a letter to Bothmar is dated 14 October 1714; that to the King is undated. The translation reads: 'Allow me, nevertheless, to draw to your attention that the reason you offer me why the King does not find it convenient to give any mark of his favour now either to myself or my family, disturbs me exceedingly. You find it appropriate to tell me that the King would think of me on some other occasion, but that he is unable to do so at the moment because of the number of those who claimed the offices for which I had taken the liberty of offering my services. I must confess, Sir, that (unless I have been misinformed who these claimants are) I am deeply hurt that such a reply had been given to me which I would have believed, without vanity, might have been given with greater justice to these claimants; and I would never have dreamt that I could have been placed in contention for the favour of our gracious King with the Duke of Richmond and Lord Selkirk. As for my son, I take the liberty to tell you, to give no further trouble to the King, I freely withdraw (for that reason alone) the claims which I have presumed to make for myself, asking only permission that he [Carlisle's son] might be taken into the household of the Prince [of Wales] to whom he has the honour of being known. [&c.]'

to deserve it. I asked them several questions, and particularly I told them they must know what part Sir William Blackett, my Lord Downe and some Bishoprig gentlemen had in this undertaking ... I am really of the opinion that they do not know much ... <sup>38</sup>

A remarkably frank letter to Townshend from General George Carpenter written on 23 November, describing his own jealousies with General Wills, leaves little doubt that Carlisle's presence on this occasion was significant:

Just as we were mounting to go into the towne Mr Wills was taking on him great command, att which I us'd him very ffreely, and was going to putt him in arrest, butt my Lord Carlisle who was present, and Lord Lumley, begg'd me nott to do itt, and indeed att that instant itt might have prov'd fatal to His Majesty's Service, for the rebells had yet possession of their armes and of the towne; and Wills was likely enough to have call'd the troops that came with him to support him. So I did nott do itt... <sup>39</sup>

*The Sermon made by the 3rd Earl of Carlisle*, (CH J8/35/14), though incomplete and clearly not in Carlisle's own hand, and the *Draft inscription for the Obelisk*, (CH J8/35/19), witness to the turbulence of the times and his loyalty towards the Protestant Settlement. Saumarez Smith details some of the correspondence surrounding the commissioning of the Obelisk, <sup>40</sup> but overlooks the extraordinarily bold political statement that Carlisle was making in erecting such a monument to Marlborough in a year in which Marlborough's fortunes were at their nadir, and when even Carlisle himself had lost, temporarily, his Lord Lieutenancies in Westmorland and Cumberland.<sup>41</sup>

The *Sermon* is especially interesting, illustrating Carlisle's atypical, but characteristic conviction that civil conflict could not be ended by victory, but only by reconciliation:

But granting [...] that our Successes shall continue to flow in the same copious Stream, yet we must ever be on our guard that the Opportunity of acquiring private Fame, & that the Pleasure (or Satisfaction which must always be indulged with extreme Caution) of raising the Glory of our Country do not lead us to entertain a Secret wish that till our conquests are more complete, the Hour of

<sup>38</sup> HMC XI Appendix Part IV, Townshend Papers, p.169. Letter: Carlisle to Townshend, 15 November 1715.

<sup>39</sup> HMC XI Appendix Part IV, Townshend Papers, p.171. Letter: General George Carpenter to Townshend, 23 November 1715.

<sup>40</sup> *BCH*, pp.130-2.

<sup>41</sup> Carlisle was dismissed from the Lord Lieutenancies of Westmorland and Cumberland on 29 April 1712, and reappointed on 9 October 1714 after Anne's death. Marlborough left England in self-imposed exile (under the threat of impeachment) in October 1712. The Whigs suffered a heavy defeat at the elections of September 1713.



Reconciliation should be delayed. This indeed would be perverting all the Ends of this Solemn Meeting, and instead of making this Fast acceptable to God, it would be insulting Him with interested Petitions for the Acquisition of Worldly Renown at the Expenditure of the Blood and Sufferings of our fellow Creature.<sup>42</sup>

If Carlisle's politics may be described as, essentially, maintaining the 1689 Protestant Settlement against sometimes virulent opposition, this did not mean he underestimated the possibilities of leniency in defusing tension. Twenty years after the Fenwick affair he intervened in the sequel to the 1715 rebellion. The heir to the Duke of Norfolk had been taken in arms at Preston, but was acquitted of treason as no information was laid against him.<sup>43</sup> As Carlisle was present in nominal command of the Militia, he must have acquiesced at least in this collective amnesia. The Marquis of Huntly, who had taken part in the rebellion in Scotland, also thought it worthwhile to write to Carlisle asking for his intercession to be added to those of others for royal leniency to be shown towards himself and his friends.<sup>44</sup>

Only after the 1715 rebellion – and possibly not until 1723 and his dismissal from the Tower, where he had been Constable since 1715 – could Carlisle be said to have retired from national politics.<sup>45</sup> These years were marked by various family preoccupations. In 1716 Carlisle acquired the grant of the neighbouring estate at Lanercost – formerly Lanercost Priory – but had to lay out considerable sums in improving the farmhouse and other buildings.<sup>46</sup> Carlisle's preference for spending time in the country began to be noticed.<sup>47</sup> Nevertheless he was still potent enough in politics for his parliamentary support to be canvassed from 1715, and to be approached to serve in Government in late 1717.<sup>48</sup> Perhaps Carlisle suspected that Sunderland was attempting to strengthen the aristocratic wing of the Whig ministry against Walpole's rising influence, and declined to be drawn into the contest – particularly when this exploited growing tensions between the King and the Prince of Wales. It is interesting to note how the Duke of Kingston's letter to

<sup>42</sup> CH J8/35/14, p.6.

<sup>43</sup> John Martin Robinson, *The Dukes of Norfolk: a Quincentennial History*, (Oxford & New York, 1982), p.149.

<sup>44</sup> Marquis of Huntly to Carlisle, 29 February, 1715/6, HMC, Carlisle Papers, pp. 20- 1.

<sup>45</sup> Carlisle's 'retirement' is complicated by his references to it on the inscription on his portrait dating from c.1730, from which it might be inferred that he retired into the country as early as 1701.

<sup>46</sup> Carlisle's convoluted dealings at Lanercost may be seen in a letter of 5 August (1730?) in the *Correspondence of Sir Robert Walpole*, held in the University Library Archive at Cambridge, catalogue mark 1800a.

<sup>47</sup> HMC, Carlisle Papers, p.21. Letters: Sir John Rushout to Carlisle, 20 March 1715/6, and Duke of Kingston to Carlisle, 23 September 1717.

<sup>48</sup> HMC, Carlisle Papers, pp. 21 & 22. Letters: Duke of Kingston to Carlisle, 23 September 1717, and Lord Sunderland to Carlisle, 13 November 1717.

Carlisle of 23 September 1717 should make special mention of his easy relations with both the King and the Prince of Wales:

You are perhaps the only man in whose power it is to create a good understanding between the King and the Prince; you have talked with them both, and they both have a good opinion of you.<sup>49</sup>

Although wise not to be drawn into difficulties between the King and Prince of Wales, Carlisle found this a balance not always easily achieved. The Peerage Bill of 1719, a measure George I favoured, and which Lord Sunderland twice attempted to promote in Parliament, became especially divisive. This proposal to limit the Crown's power to create new peerages, and to increase the Scottish representation in the House of Lords from nine elected peers to twenty-five hereditary peers, may have been intended, at least in part, to stabilise the House after Anne had created twelve peers in one day to secure the approval of the preliminaries to the Peace of Utrecht. This was considered scandalous by the Whigs – the propping up of a compromised Tory ministry, no longer in command of a majority in the House of Peers. It may, creditably, have been designed to manage Scottish affairs more effectively in the Westminster Parliament. However, it was soon perceived that one effect of the Bill denied the Prince of Wales his prerogative on accession to alter the Whig character of the administration, which might now remain Whig in perpetuity. Additionally, the measure was resented by the House of Commons, which saw possible ennoblement as a proper aspiration after loyal service in the House of Commons. Carlisle, firmly attached to Sunderland by background, conviction, and family alliance since 1717, was asked for his proxy (presumably in support of the Peerage Bill), something no doubt done in good faith at the time, but possibly regretted later.<sup>50</sup> It is evident in his pamphlet *Some Observations made upon a Paper intitl'd the List* that by 1733 Carlisle believed that it was good that commoners could aspire to ennoblement and membership of the House of Lords: in the meantime, however, his support for the measure may have alienated Carlisle from Walpole's rising star and possibly, temporarily, from the Prince of Wales and his circle. This may, perhaps, be illustrated by the presence in Carlisle's papers of a manuscript 'broadside ballad' *The Seven Wise Men of England* (CH J8/35/18) in what may be his daughter, Anne Irwin's hand. This deftly caricatures the leading politicians who joined Walpole

<sup>49</sup> HMC, Carlisle Papers, p.21.

<sup>50</sup> HMC, Carlisle Papers, p.23. Letter: Lord Sunderland to Carlisle, 18 November 1719. See *The British Aristocracy and the Peerage Bill of 1719*, ed. John F. Naylor, (New York, 1968), for documentary evidence of the range of arguments employed. HMC, Carlisle Papers, pp.123 & 126. Letters: H. Walpole to Carlisle, 13 September and 9 October 1733, and Sir Thomas Robinson to Carlisle, 24 December 1733, together with internal evidence, confirm Carlisle's authorship of *Some Observations*.



in his secession from the Whig ministry in the period 1718-20. Something of its style may be seen in this extract:

When Edgcombe spoke ye Prince in sport  
 Laugh'd at the merry elf;  
 Rejoyc'd to see within his court  
 One shorter than himself.  
 'I'm glad,' cry'd out the quibbing squire,  
 'My lowness makes your Highness higher'.

This ballad reflects the political realities of 1719. At a more literary level, a poem in Carlisle's own hand, *The Introduction to an Epistle from Antiochus to Stratonice* (CH J8/35/8), may reflect a more generalised sense of alienation:

Bright Queen of love, your aid I now implore:  
 Raise my sunk spirits, my lost sense restore,  
 New vigour give, my wasted strength repair ...

Family matters continued to engage Carlisle's attention. As noted, his eldest son and heir married Lady Frances Spencer, the daughter of Lord Sunderland, then First Commissioner of the Treasury, in 1717. His daughter Anne married Rich Ingram, Viscount Irwin, in 1718; and another daughter, Elizabeth, married Nicholas Lechmere (to be ennobled in 1721) in 1719. Additionally, at some point in this decade a bastard daughter had been born.<sup>51</sup> Small wonder, then, that Carlisle's resources began to feel some strain.

Dr William Stratford, writing to his patron and friend, the second Earl of Oxford, on 31 October 1720, reported a letter under Lord Carlisle's own hand, dated October 13th,

entreating with great earnestness, as a favour that would be very seasonable and much acknowledged that the last Michaelmas rent for the house might be paid immediately. I think this is a full proof of no little distress.<sup>52</sup>

Dr Stratford would have seen evidence of widespread economic strain at that time. In 1720 intense speculation in the South Sea scheme led to a financial crisis of the first magnitude. But Dr Stratford was mistaken in the cause: unlike many – including his son-in-law, Viscount Rich Irwin, ruined by colossal over-investment – Carlisle's own holdings in the scheme were modest. The Receipt for Settlement of his South Sea obligations survives,<sup>53</sup> suggesting a total capital outlay of £1050 across all subscriptions. Nevertheless, even though he himself did not suffer unduly, he was sufficiently concerned for the disastrous effect on others that he sent a lengthy, sensible letter of advice to his political friend, Lord Sunderland, who as First

<sup>51</sup> HMC 63, Egmont Diaries, Vol. II., p.399. Entries for 4-5 May 1737 describing a meeting of directors at the Georgia Office.

<sup>52</sup> HMC, Portland Papers, Vol. VII., p.281.

<sup>53</sup> CH J8/15/8, dated 25 June 1722.

Commissioner of the Treasury was away in Hanover with the King. Sunderland's reply may be read in the published Carlisle Papers.<sup>54</sup> Carlisle's original of 28 September can be read only in manuscript in the Castle Howard Archive, but the following extracts its salient points:

The unhappy turn that the South Sea affairs have taken has occasioned a very great and universal disorder here, and the numbers of sufferers thereby are very considerable [...] Under such a general calamity [...] let the occasion be what it will, the blame will in a great measure be charg'd (although perhaps unjustly) upon the Administration, and the discontent and ill-will that may arise therefrom be brought to their doors. [...] If I may take leave to offer my thoughts, the first thing you should do is to prevail with the King to fix the shortest day that is possible for his coming over; the immediate notice thereof be given here, and the necessary orders issued for holding Parliament. That being done, your Lordship should forthwith come away to inform yourself of the true state of affairs here, in order to consult, and prepare such remedies as you shall judge proper to lay before Parliament for healing this cruel sore; which if you cannot effect, I am afraid, may prove unfortunate to you, as it will infallibly prove fatal to numbers of people.

I am, &c.<sup>55</sup>

This letter is important, not because it suggests that Carlisle necessarily had great political influence at this time; but since the measures he recommended were the measures adopted, the letter suggests he was a shrewd observer of the political scene – even though his appointment at that time was not primarily political.

Sunderland died suddenly in the spring of 1723. Though he had suffered a good deal of personal criticism in the wake of the South Sea Crisis, there was little to suggest that he was as involved as, for example, the two Craggs, father and son, or John Aislabie. Finally acquitted of personal responsibility, Sunderland remained in the King's confidence despite Walpole's parliamentary ascendancy, and only with Sunderland's death did Carlisle become vulnerable in respect of the office he continued to hold.

In his years of service as Constable of the Tower – to which he had been appointed on 16 October 1715 – Carlisle appears humane and fair-minded, though not, perhaps, over-energetic. During his tenancy two of the rebel Lords made a dramatic escape from the Tower – Lord Wintoun and Lord Nithsdale. Perhaps it was inevitable that Carlisle would be replaced by a sterner figure after further Jacobite activities in 1719 and 1722 – more especially, perhaps, when one of those arrested and imprisoned in the Tower was his own near-kinsman, the Duke of Norfolk. Several letters are published in the HMC Carlisle Papers in connection with the treatment of

<sup>54</sup> HMC, Carlisle Papers, pp. 24 & 25. Letter: Sunderland to Carlisle, 19 October 1720.

<sup>55</sup> CH J8/1/696. Transcribed in Q. H. Wilson, 'Literary Remains of Charles Howard', II, pp. 484-7.



the Duke of Norfolk, particularly concerning permission for the Duchess to visit her imprisoned husband.<sup>56</sup> George I had practical reasons to refuse, since the Duke and Duchess had not co-habited since 1715, and the Duchess was an even more notorious Jacobite. Perhaps significantly Carlisle stood bail for the Duke himself in the sum of £1000 in May 1723,<sup>57</sup> when no longer Constable of the Tower. Carlisle had also been asked to intervene similarly on behalf of another less prominent kinsman almost exactly a year earlier.<sup>58</sup>

It is clear from the *Diary*<sup>59</sup> of Lieutenant-General Adam Williamson, his Deputy at the Tower, that the two could not co-operate, and that Carlisle criticised him for excessive zeal with some prisoners.<sup>60</sup> Nevertheless Carlisle did not allow humanitarian feeling to intervene in the extraordinary chaining of a Jacobite prisoner:

And whereas the secure keeping of him is of the greatest importance to the safety of His Majesty's person and the peace of his realms These are in His Majesty's name to will and require you to cause him the said Christopher Layer to be put into irons for the more effectual securing his person in your custody.<sup>61</sup>

Williamson, though prejudiced, encourages the view that Carlisle used the financial potential of office to the full, perfectly prepared to 'sell' places within his gift to his exclusive advantage.<sup>62</sup> Notice of Carlisle's dismissal was given in a terse note from Lord Townshend, dated 28 December 1722:

His Majesty has commanded me to acquaint your Lordship that he has no farther occasion for your Lordship[s] service as Constable of the Tower. I am with the greatest respect, (&c.).<sup>63</sup>

Contemporary letters suggest that informed observers thought Carlisle unjustly treated,<sup>64</sup> and a sense of injury is present in Carlisle's letters of protest to Townshend

<sup>56</sup> HMC, Carlisle Papers, pp.43 & 44. Letters: Townshend to Carlisle, 6 November 1722; Duchess of Norfolk to Carlisle, 7, 8 & 12 November 1722.

<sup>57</sup> HMC, Carlisle Papers, pp.45 & 46. Letter: Duchess of Norfolk to Carlisle, 25 May 1723.

<sup>58</sup> HMC, Carlisle Papers, p.40. Letter: Lady Mary Howard of Worksop to Carlisle, 23 May 1722. This was probably Bernard Howard, eldest son of Bernard, the youngest brother of the 5th and 6th Dukes of Norfolk, and himself the grandfather of Bernard Howard, 12th Duke of Norfolk. See the genealogical table in Robinson, *The Dukes of Norfolk*, facing p.240.

<sup>59</sup> *The Official Diary of Lieutenant-General Adam Williamson, Deputy-Lieutenant of the Tower of London, 1722-1747*, ed. John Charles Fox, Camden Society, 3rd Series, vol. 22, (London, 1912).

<sup>60</sup> *Diary of Lieutenant-General Adam Williamson*, p.159.

<sup>61</sup> *Diary of Lieutenant-General Adam Williamson*, p.163.

<sup>62</sup> *Diary of Lieutenant-General Adam Williamson*, p.70, entry for 4 May 1731.

<sup>63</sup> HMC, Carlisle Papers, p.45. Letter: Townshend to Carlisle, 28 December 1722.

<sup>64</sup> HMC 67, Polwarth Papers, Vol. III., p.250. Letter: George Baillie of Jarviswood to Polwarth, 1 March 1722/3. Also HMC, Portland Papers, Vol. III, p.344. Letter: Dr William Stratford to Oxford, 3 January, 1722/3.

and George I of early January, 1723.<sup>65</sup> However, his appointment on 1 June 1723 as Constable of Windsor Castle and Warden of Windsor Forest suggests that any Royal displeasure was soon dispelled.

For the next few years Carlisle appears to have devoted himself to completing the gardens and outbuildings at Castle Howard, pursuing the retired life of a country landowner. This is the period to which three important texts belong, with their evocation of the Æneas motif: *A Milk White Heifer*, a substantial semi-autobiographical poem of historical and literary interest (CH J8/35/6); the *Draft of an inscription to be carved on the Pyramid* (CH J8/35/11) and the *Draft of inscriptions to be painted by William Aikman on the portraits of the 1st, 2nd and 3rd Earls of Carlisle* (CH J8/35/12). The 306-line poem in blank verse is an accomplished inter-weaving of Book II of the *Æneid*, where Æneas is recalled from his dalliance with Dido, and Spenser's Arthurian tale of Sir Guyon's overcoming Acrasia in the 'blisful bower'. Carlisle reviews his own life and achievements in heroic mould, inviting readers to interpret his building Castle Howard and public service as confirmation of his status as legitimate leader of the Howard dynasty (instead of the Duke of Norfolk), just as Æneas, the heir to a cadet branch of the Trojan royal family, under benign divine guidance rebuilt the family fortunes in even greater magnificence in Italy. This rebranding of his life and achievement in literary terms is continued in Carlisle's contemporary embellishment of his house and gardens. The Pyramid, dating from 1728, contains an enormous bust of Lord William Howard, founder of the Carlisle Howards.<sup>66</sup> Its conception and inscription evoke the spirit of Roman piety, serving to perpetuate not only Lord William, but also the third Earl. The implicit message of the Pyramid is continued in the inscriptions added to the portraits of the first three Earls of Carlisle at this period.<sup>67</sup> On the reasonable assumption that the three portraits were to be displayed in proximity, the extraordinary length of the inscription on the third Earl's portrait is only mitigated by the smallness of the letters!

Carlisle's children caused anxiety during these years. His daughter Anne, who had married Rich Ingram, Viscount Irwin, in 1718, had been widowed in 1721. Her husband had suffered considerable financial loss as a result of the South Sea affair, and through Carlisle's intervention was appointed Governor of Barbados.<sup>68</sup> Irwin unfortunately fell ill and died before the journey to Barbados could be undertaken. Carlisle's other married daughter, Elizabeth, had married Nicholas Lechmere,

<sup>65</sup> HMC, Carlisle Papers, p.45. Copy Letter: Carlisle to George I, 2 January 1722/3, and Letter: Townsend to Carlisle, January 1722/3 acknowledging a letter from Carlisle requesting the reasons for his dismissal.

<sup>66</sup> *BCH*, pp. 9 & 147. The text in Carlisle's draft is contained in CH J8/35/11.

<sup>67</sup> *BCH*, p.9. The full texts in Carlisle's hand are contained in CH J8/35/12.

<sup>68</sup> HMC, Carlisle Papers, pp. 25 & 26 and 29 & 30. Letters: Lady Irwin to Carlisle, 17 November 1720 and 11 February 1720/1. For the marriages and subsequent fates of the Carlisle daughters, see R. M. Larsen, 'Death becomes her: the mourning and commemoration of élite women in Yorkshire, 1720-1860', *YAJ* 78 (2006), pp.182-5.



the lawyer who had represented the Crown in the trials which followed the Jacobite Rebellion of 1715. He was raised to the Peerage in 1721, but Elizabeth appears to have developed some kind of depressive illness. With the benefit of hindsight, a letter to her father dated 29 July 1721<sup>69</sup> seems prophetic, where she hopes her 'temper does not incline me to be more unreasonable than the rest of the world'. Lady Mary Wortley Montagu reported in September 1725:

The discreet and sober Lady Lechmere has lost such Furious summs at the Bath that 'tis questioned that the sweetness of the Waters can put into my Lord's blood can make him endure it, particularly £700 at one sitting.<sup>70</sup>

By February 1726 Lady Lechmere had reached a point where she apparently attempted suicide with an overdose of laudanum.<sup>71</sup> Her father and husband refused to honour her gambling debts, and this must on the evidence of the letter Lechmere sent his father-in-law have occasioned some bitterness.<sup>72</sup> Nevertheless Carlisle continued to support his daughter despite her periodic misbehaviour – as he supported his unmarried daughter, Mary, for extended periods as she took the cure at Bath.<sup>73</sup>

Carlisle's retired, country life has rather obscured the return to relatively engaged political activity in the late 1720s. In 1726 he was appointed a Gentleman of the Bedchamber, while in 1728 he was sworn a member of the Privy Council.<sup>74</sup> The correspondence preserved at Castle Howard testifies to his active interest and involvement in political life, even though his increasing propensity to bouts of gout (a condition which had first affected him as early as 1714)<sup>75</sup> meant that from 1734 he was compelled to support the government in the House of Lords by proxy.<sup>76</sup> The year 1733 marks the appearance of the anonymous *Some Observations made upon a paper intitul'd 'The List'* – a pamphlet written in support of Walpole's administration

<sup>69</sup> HMC, Carlisle Papers, p.34.

<sup>70</sup> Lady Mary Wortley Montagu, *Complete Letters*, edited by R. Halsband, 3 vols (Oxford, 1966), II, p.57.

<sup>71</sup> Montagu, *Complete Letters*, II, p.58.

<sup>72</sup> CH J8/1/375. Part of this letter is transcribed in BCH, p.187.

<sup>73</sup> Larsen, 'Dynastic Domesticity', pp. 220-1.

<sup>74</sup> CH J8/31/10.

<sup>75</sup> HMC, Carlisle Papers, p.14. Draft Letter: Carlisle to George I, October 1714. Lady Lechmere refers specifically to a fit of gout in her letter to Carlisle of 14 November 1720. HMC, Carlisle Papers, p.25.

<sup>76</sup> HMC, Carlisle Papers, p.126. Letters: Sir R Walpole to Carlisle, 3 & 15 January 1733/4, and the letter from Carlisle to Walpole of 28 November 1736 in the *Walpole Correspondence*, 2636. Carlisle had used his proxy before 1736. See HMC, Carlisle Papers, p.23. Letter: Sunderland to Carlisle, 18 November 1719.

<sup>77</sup> See Paul Langford, *The Excise Crisis of 1733*, (Oxford, 1970), for a detailed account based largely on the evidence of correspondence held in the Castle Howard archives, and printed in the HMC, Carlisle Papers.

after its difficulties over the Excise-Scheme.<sup>77</sup> Although no manuscript survives of the original, it is clear from the published correspondence between Horatio Walpole, Sir Thomas Robinson and the third Earl, that Carlisle was the author of this pamphlet.<sup>78</sup>

In his years of relative retirement Carlisle also developed interests that produced the *Essay on God and His Prophets* and the associated manuscripts (CH J8/35/15-17). Saumarez Smith notes the two library catalogues from 1698 and 1716 and the remarkably large collection of theological works the latter contains.<sup>79</sup> He recounts the Earl's contacts with the prominent Quaker, Thomas Story, in 1719, 1725 and 1732, and gives details of a discussion over dinner at Castle Howard and Carlisle's interest in theological issues.<sup>80</sup> Little exists to suggest how extensively these manuscripts may have circulated. However, 1734 marks the probable production of that part of the *Essay on God and His Prophets* which appears in a fair copy in CH J8/35/15 pages 1-30, and seems to be written in defence of Quakers and other Dissenters against the jurisdiction of the Church of England over tithes and other matters.<sup>81</sup> In this, a sincere ethical Christianity is contrasted with the pretensions of Mosaic-conceived priesthood. Carlisle's surprisingly original views may be best illustrated by the concluding couplet of his short poem, *Reason, a goddess* (CH/J8/35/5):

God's work, the whole Creation useless lay  
Till Reason her sound Dictates did display.

Although impossible to prove, this may be the otherwise unknown 'sensible pamphlet' which Horatio Walpole acknowledged in a letter later that year.<sup>82</sup> (By the time this issue came before Parliament in 1737 Carlisle was too unwell to attend and give the matter personal support.)

In the early 1730s Carlisle was promoting his children's future, securing his younger son Charles in his promotion to Colonel and position as Aide-de-camp to George II, and his widowed daughter Anne, Lady Irwin, as Lady of the Bedchamber.<sup>83</sup> The poem *A Riddle made upon the game called Quadrille* (CH J8/35/7) belongs to this

<sup>78</sup> See above, n.50.

<sup>79</sup> BCH pp.11 & 166. CH H2/3/8 *A Catalogue of the Rt Honble Charles Earl of Carlisle's Books in the Library in his Lsps House in Soho Square Taken in March 1698*, and CH H2/3/1 *Catalogue of the Rt Honble Charles Earle of Carlisle's Books In His Lordships Library att Castle Howard Taken in February 1716*. Both catalogues are transcribed under auspices of the Yorkshire Country Houses Partnership, accessed through the University Library at York.

<sup>80</sup> The visits are recorded in Story's *Journal*, pp.617-22, 659-61 & 679-81.

<sup>81</sup> For contemporary debate and projected legislation see Edmund Gibson, *Remarks on a Bill now depending in Parliament For the better Regulation of the Ecclesiastical Courts* (London, 1733), and also *An Account of the Proceedings and Debate on the Tithe Bill* (London, 1737).

<sup>82</sup> HMC, Carlisle Papers, p.135. Letter: H. Walpole to Carlisle, 30 March 1734.

<sup>83</sup> HMC, Carlisle Papers, pp. 121-2 and 136-8. Letters: H. Walpole to Carlisle, 30 June 1733, The Queen to Carlisle (in French), 11 July 1733; Sir Thomas Robinson to Carlisle, 18 April 1734, and Col. The Hon. Charles Howard to Carlisle, 14 June and 23 July 1734.



period, its internal references suggesting its composition in 1733/4. Although not positively identified as verses sent to Queen Caroline and acknowledged in Horatio Walpole's letter of 1734,<sup>84</sup> this remains a possibility.

To Carlisle's final years belong the two versions of the poem *Advice to his Son*<sup>85</sup> appearing in CH J8/35/9 & 10. That a version was printed in 1735 proves it cannot have been written, as its subtitle dramatically claims, on the eve of his death, but it envisages that event, which occurred on 1 May 1738 in Bath. After temporary burial in Bulmer parish church, Carlisle's remains were transferred to the Mausoleum in 1744.

Carlisle's final years are presented by Philip Carter (in the *DNB*) and Charles Saumarez Smith<sup>86</sup> in terms of anti-climax. Admittedly, in some senses this may be so. However, our perception of the relative importance of various Court appointments may differ from Carlisle's; and in any case it is evident from his correspondence and pamphlet that he maintained an interest in national affairs – even though often at a distance. 'Syllabubs with Lady Grisell'<sup>87</sup> may have had their own attraction for an ageing and ailing man – but she was a poet herself, and Carlisle evidently found solace in poetry. His own *Advice*, his daughter Anne's poem, *Castle Howard*,<sup>88</sup> and Thomas Gent's *Holy Rood Day*,<sup>89</sup> speak of his love of the estate he had developed in Yorkshire, and of the satisfaction he derived from the house, the estate, and the people who surrounded him there.<sup>90</sup> Carlisle's failure to complete the west wing of Castle Howard might be regretted since its eventual construction was effected in a different architectural style: nevertheless from the point of view expressed in his *Advice* it was important that succeeding generations played their part in completing the concept.<sup>91</sup>

<sup>84</sup> HMC, Carlisle Papers, pp. 135. Letter: H Walpole to Carlisle, 30 March 1734.

<sup>85</sup> The matter, though not the poem *per se*, was commended by Horace Walpole, 2nd Earl of Orford, in his *Catalogue of Royal and Noble Authors, in Complete Works*, 5 vols (London, 1798), I, pp. 534-5.

<sup>86</sup> *BCH*, p. 189.

<sup>87</sup> *BCH*, p. 189, quoting Lady Grisell Bailie, *Household Book, 1692-1733*, ed. R. Scott-Moncrieff, (London, 1911), pp. 300-1.

<sup>88</sup> Lady Anne Irwin, *Castle-Howard, A Poem* (London, 1732).

<sup>89</sup> *Holy-Rood Day, Address'd to the Rt Honourable Charles, Earl of Carlisle, Written in the Year 1736 by a young gentleman in Yorkshire*, printed in the *Gentleman's Magazine* for August 1737, p. 507, anonymously. This was probably written by Thomas Gent of York.

<sup>90</sup> John Macky, *A Journey through England in familiar Letters from a Gentleman here to his Friend Abroad*, 2 vols (London, 1722), II, pp. 211, 214-15.

<sup>91</sup> Macky, *Journey*, II, p. 214. NB This is 1722 at the very latest. Carlisle lived at least another sixteen years, so leaving one wing for his son to complete must have been a deliberate decision. Daniel Defoe writes of Carlisle observing that 'Noblemen should only design, and begin great palaces, and leave posterity to finish them gradually, as their estate will allow them': *A Tour thro the Whole Island of Great Britain, divided into Circuits or Journies*, 1st edn, (London, 1724-1727), III, pp. 164-5.

Apart from a eulogistic *Pater Patriæ*<sup>92</sup> published by Thomas Gent in 1738, Charles Howard is remembered in three assessments of his character. Lady Mary Wortley Montagu, a family friend of long standing, (and a partner in the 'high romps' of 1706) wrote of him as 'a man of great honour'.<sup>93</sup> The Hon. Vicary Gibbs includes in his entry on Carlisle this earlier assessment by Macky:

A gentleman of great interest in the County and very zealous for its welfare: with a fine estate and a very good understanding, with a grave deportment, is of a middle stature [and] fair complexion.<sup>94</sup>

An interesting account is given by a kinsman, the Hon Charles Howard, later the 10th Duke of Norfolk, in his *Anecdotes*.<sup>95</sup> This account is made the more poignant by being placed immediately after that of the disgraced and disgraceful Lord Howard of Escrick who had so shamefully betrayed Lord Stafford, Lord Essex, Lord Russell and Algernon Sidney in 1683:

CHARLES HOWARD, Earl of CARLISLE, Was a very worthy old English Peer. His noble works, at Castle Howard, are sufficient proofs of his refined taste: which works, he says on a monument created there, were not only done, but paid for by himself: a proper lesson to those, whose thirst for improvements often makes them run beyond their incomes, and who shew their taste at the expence of the ingenious and industrious people they employ.

Chiefly remembered today for Castle Howard, Carlisle has earned a modest place in political history for his brief appearance in high office at two critical moments in his country's history. In these literary remains we have an unusual example of documents which both inform, and are informed by, the life of an early eighteenth-century aristocrat. Encompassing a variety of genres: poetry, sermon, inscription, political and religious pamphlets – even a broadside ballad – they arise from and address very different issues. Variety alone would make them and their author interesting. But additionally, this was a man whose family roots, and whose own life, had been largely spent in the context of dissension festering from the days of the Civil Wars, and which were now beginning to heal under the Augustan rule of the House of Hanover. We may well categorize – and thus dismiss him – as little more than the land-owner and minor politician that he undoubtedly was: more a cog within the social machine than a man of reflection and insight. But as these documents offer insights into the springs motivating Carlisle, so we can understand more of one of those who gave William III, Queen Anne, and their Hanoverian successors their support, and in doing so played some part in the course of subsequent history.

<sup>92</sup> Thomas Gent, *Pater Patriae, Being an Elegaic Pastoral Dialogue occasioned by the most Lamented Death of the Late Rt Honble and Illustrious CHARLES HOWARD*, (York, [1738]). Two copies are preserved in the York Minster Library.

<sup>93</sup> Montagu, *Complete Letters*, III, p.162.

<sup>94</sup> *Complete Peerage*, ed. Vicary Gibbs, quoting Macky, *Characters*, 1733, p.59.

<sup>95</sup> The Hon. Charles Howard, later 10th Duke of Norfolk, *Anecdotes of some of the Howard family*, (London, 1769), p.115.



# YORKSHIRE ESTATES AND MINERAL EXPLOITATION, 1750-1830\*

By David S. Cross

*This article considers some of the factors affecting the growth of the exploitation of the mineral resources, especially coal, lying under a number of estates in the districts around Huddersfield and Halifax, 1750-1830. These factors include the area's geological characteristics and the availability of access to transport systems, particularly canals. The evolution of legal and commercial structures is also considered, as is the development of technical and mercantile expertise on the part of both estate owners and coalmasters.*

## INTRODUCTION

This article considers how some smaller estates in the environs of Huddersfield and Halifax in the period c. 1750-1830 exploited the mineral reserves of their land, and reviews the strategies that they adopted in order to realise the value of those assets. The estates include those of the Thornhill, Savile, Beaumont, Spencer-Stanhope and Lister families, the size and range of whose landholdings varied considerably. The Thornhills had been lords of the manor of Fixby since the fourteenth century, and held lands around Huddersfield, near Leeds at Calverley, and in Lancashire at Littleborough and near Rochdale. The main house locally was Fixby Hall, although the family's usual residence was at Riddlesworth, Norfolk.<sup>1</sup> The Savile estate was located in Thornhill, Dewsbury, Emley and Shelf, and the family also owned lands in Nottinghamshire and Fermanagh.<sup>2</sup> Its holdings in West Yorkshire were relatively small, that at Shelf being around eight hundred acres. The 'home' estate of the Beaumonts of Bretton Hall was also quite small at 550 acres, although other lands held locally amounted to five thousand acres. The Beaumonts had larger estates in north-eastern England with extensive coal and lead mining interests.<sup>3</sup> The Whitley

\* The essay on which this article is based was awarded the Yorkshire Society's Beresford Prize (formerly the Yorkshire History Prize) in 2008.

<sup>1</sup> Letter from James Garside, Land Surveyor for the Thornhill estate, to Thomas Thornhill, 2 April 1802, quoted in 'Land Agents and Surveyors of Huddersfield and District to 1840' at <http://homepage.eircom.net/~lawedd/SURVEYORS.htm>, accessed 6 June 2007. Garside was negotiating a salary with Thornhill and enumerated in the letter the work he had undertaken on various parts of the Thornhill estate. F. Cowell, 'Richard Woods (?1716-1793): A Preliminary Account, part II: Mr Wood of Essex', *Garden History*, 15:1 (Spring, 1987), 27.

<sup>2</sup> Sir George Savile and John Lumley Savile, <http://www.oxforddnb.com>, accessed 6 June 2007.

<sup>3</sup> W. P. Hartley, 'Five Landed Estates: Yorkshire and the Development of Coal Mining during the Nineteenth Century', *Local Historian*, 23:4 (November 1993), 193; J. T. Ward, 'The Beaumont Family's Estates in the Nineteenth Century', *Bulletin of the Institute of Historical Research*, 35 (1962), 170-1.

Beaumont estate comprised around five thousand acres.<sup>4</sup> The Shibden Hall estate of the Lister family near Halifax was the smallest at four hundred acres.<sup>5</sup> Conversely, the Spencer-Stanhope estate was relatively large at around eleven thousand acres, centred on Cannon Hall but including lands in Horsforth.<sup>6</sup>

As these family holdings varied, so did the extent and nature of the minerals which they contained. The Pennine anticline runs north to south, the strata dipping eastwards on the Yorkshire side, and coal seams outcrop in the valley sides from Halifax eastwards. In contrast to the thick, regular seams of good coal in the south Yorkshire field, the coal in Pennine West Riding is quite thin, faulted and of variable quality. There is good steam coal and excellent metallurgical coal, but the thickest seams, the Halifax Soft and Hard Bed coals, are only two to three feet thick. However, quite narrow seams could be economically viable because of their accessibility on the outcrop.<sup>7</sup> Ironstone also occurs south of Bradford and east of Huddersfield.<sup>8</sup>

Expert knowledge of the commercial value of different coal beds and of the technical challenges of mining were particularly necessary in the West Riding because of the difficult geological conditions and multiple seams of varying quality. John Hardy, agent to the Spencer-Stanhope estate, described the West Riding coalfield to the 1800 Parliamentary Commission on the coal trade. Hardy stated that the quality of the coals was 'very variable, but a great many are a very good house-fire coal ... [the seams vary] from two feet to ten feet; around Barnsley ten feet; and about Bradford thirty inches; where the seams are so small there are generally more in the same ground'.<sup>9</sup> Thomas Bedford's knowledge of the Earl of Dartmouth's lands near Huddersfield encompassed both mining technicalities and commercial considerations.<sup>10</sup> He

<sup>4</sup> Ward, 'Beaumont Family's Estates', p.176.

<sup>5</sup> J. Liddington, 'Gender, Authority and Mining in an Industrial Landscape: Anne Lister (1791-1840)', *History Workshop Journal*, 42 (1996), 61.

<sup>6</sup> J. Bateman, *The Great Landowners of Great Britain and Ireland* (repr. Leicester, 1971), p.420.

<sup>7</sup> See Appendix 4 for a short discussion of early mining techniques and problems.

<sup>8</sup> D. H. Holmes, *Mining and Quarrying Industries in the Huddersfield District* (Huddersfield, 1967), pp.16-22; Hartley, 'Five Landed Estates', pp.188, 194; M. C. Gill, 'Keighley Coal', *British Mining*, 74 (2004), 15-17. The characteristics of steam coal are fast combustion, generating a high temperature with minimal ash residue; metallurgical coal should possess a low sulphur content.

<sup>9</sup> Hardy would no doubt have been taking the opportunity to present Yorkshire coal to the Committee in a favourable light, hence the immediate positive qualifications of the variability of the coal quality and thinness of some seams. *House of Commons Report on the State of the Coal Trade, 1800*, in *Reports from Committees of the House of Commons 1715-1801, Printed But Not Inserted in the Journals of the House 1803-1806*, vol. X (Bishops Stortford, 1973), pp.565-6.

<sup>10</sup> Thomas Bedford (died November 1873) was mineral surveyor to the Earl of Dartmouth's Yorkshire estate, and mined coal leased from the earl, at Bruntcliffe. Coal notes volume 1, A-G; unpublished notes, John Goodchild Collection, Wakefield. Information reproduced by permission.



seconded Hardy's view that the Flockton Thin coal was 'excellent',<sup>11</sup> describing the seam as 'of an excelant quality supposing to be the best coal of...any in this Neighbrod'. The Three Quarters seam at Briestwistle 'works to fine coal but owing to the ashes been so white the peple in the Low Counterys dosnt like them on account of their brick floors'. A seam at Middleton was 'very little thought of on account of leaving such a sulphurous smell when the fire is cleansed'.<sup>12</sup>

Coal was therefore not a generic commodity, but had a range of uses, values and markets. Competition from better quality coal could make a colliery unviable, as John Hardy made clear to Walter Spencer-Stanhope:

Whether Bocock [a tenant who was mining on the Horsforth estate] can afford to pay you this rent is uncertain. I am inclined to think he cannot, for Horton coals will be by the Canal brought into the neighbourhood over Calverley Bridge. They are a much better quality than yours.<sup>13</sup>

Hardy advised that the estate should rent land for a canal staithe to the importer of Horton coal, as if it did not, another landowner assuredly would and Spencer-Stanhope would gain no income from the trade. In 1803 the Bowling Ironworks simultaneously demonstrated a strong desire for a local source of coal with a degree of commercial caution, in a letter to the Thornhill estate:

Willing to take them [the rights to mine certain lands] at all risks to the thickness and quality of the coal and pay £80 per acre (an acre per year and what more we may get) if the bed is within fifty yards of the surface and not less than 18" thick. Or if we find it on trial 18" thick we will give £60 per acre and £5 per acre for every inch the bed may be found thicker.<sup>14</sup>

Landowners and coalmasters alike adapted their attitudes to reflect the level of uncertainty. The coal measures around Huddersfield and Halifax were exploited early because of their easy accessibility on the outcrop, but the variable quality and geological problems restricted the economically workable reserves. The large-scale extraction of the coalfield in the area began in the eighteenth century, often by landowners who worked shallow pits as an estate activity. However, in later years most estates sold the right to extract the coal to entrepreneur coalmasters through the commercial device of the lease, and, as in other parts of England, these leases became crucial to the industry's structure.

<sup>11</sup> *House of Commons Report on the State of the Coal Trade, 1800*, p.565.

<sup>12</sup> All quotations from Thomas Bedford, 'Memorandum of the Seprate Seams of Coal in the Estates of Right Hon. William Earl of Dartmouth in Yorksher' (1832). KC312/4/1, Tolson Museum family, estate and personal papers, WYAS (Kirklees) [K]. Bedford's comments suggest that coal from the area had been involved in the export trade.

<sup>13</sup> Letter from John Hardy to Walter Spencer-Stanhope, 27 July 1778. 60579/1, Spencer-Stanhope papers, Sheffield City Archives.

<sup>14</sup> Letter to Robert Oastler, Thornhill's agent, dated 25 April 1803. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

## LANDLORDS AND LEASES

Landowners had long appreciated the potential of mineral deposits to provide estate income additional to that from agriculture. The right of English landowners to the minerals (except gold and silver) found under their land had been established in the sixteenth century, and by the early eighteenth century the separation of the rights to the use of the surface of the land and to its subterranean resources was commonplace.<sup>15</sup>

The more far-sighted estate owners accumulated land with mineral potential. This could be achieved by purchase or inheritance, and landowners might also enclose common land in order to secure the mineral rights.<sup>16</sup> In August 1714 Sir Walter Calverley of Esholt Hall bought some land being enclosed on Idle Common on the grounds that 'I doe not think that there is any advantage in the purchase at present, but I think it may be of advantage in time, for a great part of the wastes are coal'.<sup>17</sup> Enclosure of common land appears to have been undertaken in the Shelf area by the Savile family, who sold off some of the surface but retained the mineral rights.<sup>18</sup> Opportunity might knock but be ignored: in 1784 Walter Spencer-Stanhope rejected John Hardy's advice to buy the coal and ironstone-rich estate of Low Moor, because he did not wish to take on further debt to fund the purchase. Hardy, less mortgaged than his employer, became a partner in the purchase of the estate, and developed it into the Low Moor Ironworks.<sup>19</sup>

Although some eighteenth century estates seemed to consider the exploitation of coal reserves to be a service to the locality as much as a commercial venture, by the early nineteenth century most landowners were intensely aware of the value of their mineral possessions.<sup>20</sup> Thomas Bedford compiled a catalogue of the Earl of Dartmouth's Yorkshire coal reserves in 1832. It contained detailed descriptions of the seams, the amount still to be worked and a commentary on their commercial value, and enabled a clear picture of the estate's mineral potential to be drawn.<sup>21</sup> The value of minerals could be realised through 'in-house' mining or by leasing the extraction rights to another party. The latter approach enabled income to be generated through a

<sup>15</sup> G. E. Mingay, *The Gentry: The Rise and Fall of a Ruling Class* (London, 1976), p.56; W. B. Trigg, 'The Halifax Coalfield', *Transactions of the Halifax Antiquarian Society* (November 1930), 130-2; J. Lister, 'Coal Mining in Halifax', in W. Wheatear (ed.), *Old Yorkshire* (1885), pp.272-3.

<sup>16</sup> Mingay, *Gentry*, p.97.

<sup>17</sup> *Publications of the Surtees Society* 77 (Durham, 1883), 136-7.

<sup>18</sup> The complex situation on the Shelf estate (which led to considerable litigation) is described in a letter from J. Sykes, Savile's agent, to John Hardy, 1 April 1799. DD/S/I/166, Savile papers, WYAS (K).

<sup>19</sup> G. Firth, 'The Roles of a West Riding Land Steward, 1773-1803', *YAJ* 51 (1979), 111-12.

<sup>20</sup> A 1767 lease on the Thornhill estate authorised the lessee to get coal 'sufficient for the supply of the inhabitants adjacent to the colliery'. Lease dated 31 Oct.1767. DD/T/L/XVa/1, Clarke-Thornhill papers, WYAS (K). Mining tenants could be required to supply coal at fixed prices to local commercial ventures; for examples, see below, p.9.

<sup>21</sup> Bedford, 'Memorandum of the Seprate Seams', KC312/4/1.



commercial medium with which landowners were familiar and which produced a predictable return, enabling coherent financial planning for the estate.<sup>22</sup> From the mid-eighteenth century, therefore, landowners began to withdraw from direct involvement in mining as they did also from commercial agriculture, and increasingly leased out minerals to entrepreneurs with the capital and expertise to take on the risk of extracting them.<sup>23</sup>

Some comparisons of the relative value of land for farming or mining would be instructive. John Holroyd testified in a legal dispute relating to the Savile estate that he had been asked to price some land in Shelf:

Witness accordingly went and afterwards told Mr Hirst that he thought it was worth about £140 ... he had no idea of valuing anything but the land as he thought the coal belonged to the Lord of the Manor - if he had understood the coal to belong to Mortimer [the surface freeholder] he would have valued it at least £300 more.<sup>24</sup>

In 1799 the Thornhill estate let on fifteen year leases for agricultural use a forty-two acre farm in Calverley and two parcels of land totalling somewhat over twelve acres on the edge of Huddersfield, at £50 0s.0d. and £15 0s.0d. p.a. respectively.<sup>25</sup> Twenty five years later, Royd House in Shelley, a twenty-eight acre property including a substantial house, was valued for rent by the Green family. The estimated annual rental was £40 8s.0d., of which the house itself was £11 0s.0d. At the same period other parcels of land in the Emley and Shelley areas were being rented for agricultural use at between 10s. and £1 0s.0d. per acre p.a..<sup>26</sup> The relative value of coal rights in these localities over the same period is shown by twenty-one-year leases which were let in 1796-1797 in Calverley for £30 per acre extracted and Flockton for £40 per acre, and in 1823-1827 in Flockton (twenty-year lease) and Kirkburton (eleven years) in the range £60 to £80 per acre extracted. In all cases this was a substantial premium on the agricultural income.<sup>27</sup>

<sup>22</sup> It should be stressed that minerals were not actually 'rented' or 'leased' for extraction, but sold: '...coal is capital, not in any sense income, coal rents being in point of fact annual coal sales'. Bateman, *Great Landowners*, p.xxiii.

<sup>23</sup> Mingay, *Gentry*, p.83; J. T. Ward, 'West Riding Landowners and Mining in the Nineteenth Century', *Yorkshire Bulletin of Economic and Social Research* 15 (1963), 46.

<sup>24</sup> Evidence given in 1812. DD/S/I/168, Savile papers, WYAS (K).

<sup>25</sup> Lease of Woodhall Hill dated 3 Dec.1799, DD/T/L/V/76; lease of lands in Lindley and Longwood dated 16 Oct.1799, DD/T/L/XXVb/2. Clarke-Thornhill papers, WYAS (K).

<sup>26</sup> Leases of land in Shelley and Emley dated 25 Aug.1832 (annual leases), and valuation of Royd House n.d. but c.1825-1830. KC/6/9/1, Kidd Meller papers, WYAS (K).

<sup>27</sup> Lease in Kirkburton dated 1 Feb.1823, KC/6/9/1, Kidd Meller papers; lease in Middle Shitlington (Flockton) dated 1 May 1796, DD/S/I/210 Savile papers; lease in Lepton dated 18 Sept.1827, WBE/I/141, Whitley Beaumont papers; lease in Wadlands and Priesthorpe, Calverley, dated 8 May 1797, DD/T/L/V/68, Clarke-Thornhill papers. All WYAS (K).

In most aspects of the legal arrangements, the leasing of mineral reserves during the mid-eighteenth century reflected established agricultural practice.<sup>28</sup> This included the length of the lease term and the use of the conventional legal calendar for payment.<sup>29</sup> Most agricultural agreements were for fourteen to twenty-one years, and twenty of a sample of thirty six coal leases entered into by West Riding estates between 1740 and 1836 were for twenty-one years<sup>30</sup> while the next most frequent term was fourteen years.<sup>31</sup> Very long leases (forty and sixty years) were more typical of the earlier period and rarely seem to have occurred after 1800.<sup>32</sup> As will be discussed below, short leases might be offered for specific commercial reasons, but it seems likely that the twenty-one-year lease became standard because it was a familiar practice for the landowners and their legal advisors. It gave the lessee sufficient time to recoup his investment, but was short enough to ensure that extraction would commence promptly and the disturbance of land would end within a reasonable span.

Eighteenth-century coal leases in the West Riding were often linked to output by specifying the maximum number of colliers to be employed, to prevent the seam being rapidly stripped out and the lease quickly surrendered.<sup>33</sup> A 1797 Savile estate lease prohibited the lessees (Joseph Jagger and James Milnes, co-founder of the Flockton coal-owners Milnes, Stansfield & Briggs) from employing more than ten pickmen unless they paid an additional £10 p.a. to the annual rental of £100; furthermore, the colliers could work only in daylight hours. The lessees also had to

<sup>28</sup> J. Flinn and D. Stoker, *The History of the British Coal Industry, vol. 2, 1700-1830: The Industrial Revolution* (Oxford, 1984), pp.43-9; T. S. Ashton and J. Sykes, *The Coal Industry in the Eighteenth Century* (Manchester, 1964), pp.175-93.

<sup>29</sup> For example, an indenture of 1789 relating to the lease of staithes on the River Calder required half-yearly payments on Lady Day and at Michaelmas. Indenture dated 30 Mar.1789. DD/T/L/XL/2, Clarke-Thornhill papers, WYAS (K). Other traditional oddities remained: Sir Watts Horton's 1790 lease of coal required the lessees to keep a dog and a cock for his use or to pay 20s. and 5s. in lieu. Lease dated 2 May 1780 (other evidence indicates that this should read 1790). SH:2/CM/1790, Shibden Hall papers, WYAS (Calderdale) [C].

<sup>30</sup> 21-year lease dates and source in the sample: 17 May 1754, WBD/IV/345; 31 Oct.1767, DD/T/XVa/1; 30 Oct.1788, DD/T/XVa/6; 4 Aug.1792, DD/S/I/166; 3 Sept.1792, WBD/III/222; 1 Nov.1793, DD/S/I/166; 9 July 1793, DD/S/I/210; 1 May 1796, DD/S/I/210; 2 Jan.1797, DD/S/I/74; 6 Dec.1799, DD/HS/F/9; 16 Dec.1799, DD/S/I/123; 16 Dec.1799, DD/S/I/210; 25 April 1803, DD/T/C/3; 30 Jan.1806, DD/S/I/166; 30 June 1810, DD/T/XLIII/4; 25 Feb.1811, DD/T/C/3; 1 May 1813, DD/T/L/V/83; 1 May 1817, DD/S/I/210; 9 Jan.1822, DD/S/I/210; 7 Mar.1836, WBE/1/141. Clarke-Thornhill, Helliwell and Sutton, Whitley Beaumont and Savile papers, WYAS (K).

<sup>31</sup> 14-year lease dates and sources in the sample: 2 Feb.1781, DD/T/L/XVIII/3; 15 Sept.1812, KC165/369; 2 Feb.1813, DD/S/I/47; 22 Mar.1813, 1 Jan.1816, DD/S/I/21; 1818, DD/S/I/47. Clarke-Thornhill, Crosland and Fenton, and Savile papers, WYAS (K). SH:2/CM/1813. Shibden Hall papers, WYAS (C).

<sup>32</sup> 60-year lease date and source in the sample: 22 May 1775, SH:2/CM/1775/3. 40-year lease: 1797, SH:2/CM/1797. Shibden Hall papers, WYAS (C).

<sup>33</sup> Usually referred to as 'pickmen'- coal-getters, not ancillary workers such as hurriers or windlass operatives.



provide coal at a stated price and weight to a local iron smelting operation.<sup>34</sup> A 1767 lease by the Thornhill estate required the lessee to have at least four colliers in operation by the lease's first anniversary, to ensure that extraction began promptly.<sup>35</sup> The Thornhill estate also used its mine leasing arrangements to promote other local industry: a lease of 1805 mandated the lessees to deliver seventy dozen of coal annually at 2/6d per dozen to a pottery in Lindley cum Quarmby, 'for the drying of the pots'.<sup>36</sup>

The level of payment might be linked to the end-user sale price, especially in the early nineteenth century when coal prices rose rapidly.<sup>37</sup> Sir Watts Horton let his coal at High Sunderland near Halifax for £60 p.a. in 1790, permitting a maximum of ten pickmen and requiring payment of an additional annual £30 if the price of a horse load of coal rose to 4½d or more.<sup>38</sup> The lease therefore attempted to limit the rate of production and to appropriate some of the revenue resulting from rising prices. Other landowners took a similar course. In an agreement dated 1800, the Whitley Beaumont estate specified that, as well as an annual rental, half the income generated by an increase of the pithead price above a stated level would accrue to the estate.<sup>39</sup> However, when the High Sunderland agreement was renewed in 1802, although the restriction on pickmen was retained and their hours of work and maximum daily output were specified, the payment method changed to a rental. The charge was much higher, at £380 p.a., illustrating a disadvantage of the lease, that the commercial relationship it embodied might eventually lag behind economic reality.<sup>40</sup>

<sup>34</sup> Lease dated 2 Jan. 1797. DD/S/I/74, Savile papers, WYAS (K). The ironworks was probably one near Emroyd pit, owned by James Milnes. J. Goodchild, 'Further Aspects of Old Flockton Collieries', *British Mining*, 80 (2006), 4. A further example of a limitation on coal-getters is a 1754 lease granted by the Whitley Beaumont estate in the Lepton area for an annual rental of £23 6s.0d., which specified that not more than eight miners could be employed. Lease dated 17 May 1754. WBD/IV/345, Whitley Beaumont papers, WYAS (K).

<sup>35</sup> Lease dated 31 Oct. 1767. DD/T/L/XVa/1, Clarke-Thornhill papers, WYAS (K).

<sup>36</sup> Lease dated 19 Aug. 1805. DD/T/L/XXVb/2, Clarke-Thornhill papers, WYAS (K).

<sup>37</sup> The average price per ton sold by Middleton Colliery increased 50 per cent in the period 1790 to 1803, and in the first fifteen years of the nineteenth century the price of coal in London reached the highest levels recorded between 1800 and 1913. G. Rimmer, 'Middleton Colliery near Leeds, 1770-1830', *Yorkshire Bulletin of Economic and Social Research*, 7 (1955), 57; B. R. Mitchell, *Economic Development of the British Coal Industry, 1800-1914* (Cambridge, 1984), pp. 273-5.

<sup>38</sup> Lease dated 2 May 1780 (other internal evidence indicates that this should read 1790). SH:2/CM/1790, Shibden Hall papers, WYAS (C).

<sup>39</sup> Lease dated 1800 (no more precise date). WBD/IX/97, Whitley Beaumont papers, WYAS (K).

<sup>40</sup> Lease dated 27 Aug. 1802. SH:2/CM/1802. Shibden Hall papers, WYAS (C). The danger of excessively long and inflexible pricing (and also raising a question mark on the reputation of the Scots for canniness, at least as far as the landowning classes were concerned) was illustrated by the permanent royalty of 4d. per hundredweight cart entered into by Meiklam of Carnbroe at a time when coal prices were low' followed by a steady rise in prices from which the landlord gained no benefit.' J. T. Ward, 'Landowners and Mining' in J. T. Ward and R. G. Wilson, *Land and Industry: The Landed Estate and the Industrial Revolution* (Newton Abbot, 1971), pp. 68-9.



As the nineteenth century progressed and the price of coal, though fluctuating, generally trended downwards, leases in the Lancashire and Yorkshire coalfields were almost universally charged by rental per acre of coal extracted. Payment was easily determined by measurement and, through the imposition of a minimum annual acreage charge with any additional coal extracted paid *pro rata*, could ensure that the lessee had an incentive to start mining promptly after the commencement of the agreement.<sup>41</sup> Under-production could be carried forward into future years and indeed into a renewal of the lease.<sup>42</sup>

After 1810 the leases granted by the Thornhill, Savile and Whitley Beaumont estates standardised on payment per acre. The multiple seams occurring in the West Riding coalfield were often leased at differential prices relative to their market value, thickness and cost of extraction, as can be seen in the Thornhill property at Calverley. William Green, Thornhill's coal factor, advised the estate not to sell the lower bed coal for less than £120 per acre, with a minimum charge of two acres p.a. for a lease of twenty-one years. Green believed that this would allow Jennings, the prospective lessee, sufficient security of tenure to justify the installation of a steam engine to drain the coal and generate the best return for the estate. He also advised that, in order to encourage early extraction, a lease to Jennings of two upper coal seams should be for only fourteen years.<sup>43</sup> On Thornhill land at Cleggswood near Rochdale, Green recommended that the estate's profit would be maximised by leasing some thin upper seams to the same company as was getting the lower coal, even though the price was relatively low at £40 per acre, because 'If they don't get it, it won't pay anyone [else] to do so'.<sup>44</sup> At Littleborough, on other Thornhill property, the prospective lessees (the Shuttleworths) had offered £80 per acre for the coal. Green pointed out that this coal was good for metalliferous use and was two miles closer to the ironworks owned by the prospective lessees than that being offered by a competing landowner. His terse and commercially realistic advice was to hold out for £84 per acre: 'Sit upon it, for Mr Shuttleworth's partner told me himself that it is the best coal that they can buy for to refine the iron with'.<sup>45</sup> Lease rentals could also vary between seams with regard to the minimum annual quantities. Messrs Aydon and Elwell (Bowling Ironworks) leased six seams of coal and ironstone from the Savile estate at Shelf in 1806, for three of which they paid a minimum annual rental

<sup>41</sup> Mingay, *Gentry*, p.83; Ward, 'West Riding Landowners and Mining', p.46; F. Crouzet (ed), *Capital Formation in the Industrial Revolution* (London, 1972), p.179.

<sup>42</sup> As when the Sheard family re-leased the Cowms Colliery, Lepton, from the Whitley Beaumont estate in 1827; an allowance of £590 4s.1½d. was made for 'coal paid for in rent but not gotten which under the new lease the tenants are allowed to work out by getting (free of charge) an adequate extent of coal at £80/acre'. Ledger recording details of leases and coals got, 1827-1861. WBI/I/343, Whitley Beaumont papers, WYAS (K).

<sup>43</sup> Letter from William Green to Robert Oastler, Thornhill's agent, 25 Feb.1811. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>44</sup> Letter from William Green to Robert Oastler, Thornhill's agent, 24 Dec.1810. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>45</sup> Letter from William Green to Robert Oastler, Thornhill's agent, 25 June 1809. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).



of two or three acres; the thinner seams occurring between the main beds would be paid for 'as got'. These seams would presumably be dug only as convenient or in the event of difficulties in getting the thicker coal. The minimum annual payment was £480 0s.0d. for a lease of twenty-one years, a substantial commitment.<sup>46</sup> The pricing of coal leases by landlords might therefore be informed by commercial, geological and transportation factors, supported by knowledge of local conditions and practical mining.

Although the leasing of coal reserves usually realised a higher financial return, acre for acre, than agriculture, a prudent lessor might wish to ensure that 'once-only' mineral extraction did not damage the renewable resource of agriculture. An agreement of 1792 between the Whitley Beaumont estate and James Milnes and John Woollin specified the number of pits that could be active simultaneously, the location of the pits (close to the Wakefield turnpike, thereby reducing damage to estate roads), and a timescale within which the pits had to be filled after abandonment.<sup>47</sup> Such requirements were commonplace in leases from the early nineteenth century onwards, and included defined rates for damages, specification of the number and location of shafts to be sunk, and clauses to ensure that subterranean works did not damage the landowner's house and gardens or trespass on to adjoining properties.<sup>48</sup> These reflected the differing interests of landlord, mining lessee and surface tenant in a risky and increasingly complex environment requiring a high level of capital investment.<sup>49</sup> Relationships between mining and agricultural lessees could be difficult, a tension expressed bluntly and with a hint of defensiveness by the agent for the Savile estate in Shelf:

The getting of ironstone is to be sure very destructive to land and I confess that I have often felt for the owners of estates in Shelf, but it is of too much consequence to Mr Savile to abandon his right on that account...Mr Savile will give the freeholders every satisfaction in his power, having no wish to get either

<sup>46</sup> Memorandum dated 30 Jan. 06. DD/S/I/166, Savile papers, WYAS (K).

<sup>47</sup> Lease dated 3 Sept. 1792. WBD/III/222, Whitley Beaumont papers, WYAS (K).

<sup>48</sup> Lease dated 30 June 1810 specifies the right to make coke, DD/T/L/XLIII/4; an award statement dated 10 Feb. 1809 in a dispute about damages for which an arbitration process was brought into play as defined in the original lease dated 16 Nov. 1787, DD/T/LP/15; lease dated 2 Jan. 1797 states a requirement to leave barriers against the coal of adjoining lands, and not to drain or mine the coal on those lands, DD/S/I/74; lease dated 1 May 1817 which states that not more than two shafts in total can be dug and specifies their location, DD/S/I/210; lease dated 5 Sept. 1803 requires the lessees to fill up or remove disused pits and pit-hills within twelve months of abandonment, and meantime to dig ditches around the hills to prevent foul water from seeping into the surrounding fields; also specifies damages of two guineas per acre for land spoilt by mining activity, WBD/IV/246; lease dated 6 Dec. 1799 assigns punitive damages of £80 per acre for land left damaged at the end of the lease, DD/HS/F/9; lease dated 3 May 1811 proscribed mining within twenty yards of the Fixby estate grounds (the precision of the measurement indicating also the small-scale nature of mining), DD/T/L/XVa/2; draft lease between the estate and John Crowther and Jonathan Senior of 1800 (no more specific date) forbidding mining under a plantation, WBD/IX/97. Clarke-Thornhill, Whitley Beaumont, Helliwell and Sutton, and Savile papers, WYAS (K).

<sup>49</sup> K. N. Moss, 'Mining Leases', *Historical Review of Mining* (1931), 331-2.



coal or iron except he has a right to.<sup>50</sup>

Even if work practices and compensation were contractually defined, there remained considerable potential for dispute. The Thornhill estate manager wrote rather wearily:

I have enquired of the tenants respecting what sums are due to them for damages and I find poor Zach. Gamble wants £1 6s.0d., besides filling up an old pit which was made by Mr Hinchliff many years ago, and which was very dangerous, but they tell Zach. that they will not give him anything for it as he did it without acquainting them; this is not reason, if it be Law. Edmond Greenwood and Jonas Margerison wants considerable sums, but cannot have their a/c till Monday. There are many pits and pit hills which should be filled and remade.<sup>51</sup>

Disputes could be complex; an arbitration award made in 1809 following the expiry of a lease required the lessee and the Thornhill estate to compensate the surface tenant, and the lessee and the estate to pay each other for land damages and mine buildings left *in situ*.<sup>52</sup> The acquisition by the coalmaster of the surface land as well as the coal rights became more common as the scale of mining and the need for pithead infrastructure grew.<sup>53</sup> Possibly the tensions described by Savile's agent encouraged mining companies to buy the surface land, to minimise operational problems. In some circumstances, competing land uses might be considered more valuable than mineral resources. The Ramsden estate, at a time when it was expanding its coal interests elsewhere, refused to allow mining close to Huddersfield town centre (in which it was a major built estate landlord) in order to prevent damage to surface structures.<sup>54</sup>

Technological changes influenced the provisions of leases, and presented additional revenue opportunities to the landowner. In the documents inspected for this study, the first mention of rail transport appears in a 1793 lease to the Ingham brothers of Savile estate coal in the Thornhill area (although a wooden plateway was in operation at Flockton by c. 1780).<sup>55</sup> A dedicated transport link enabled an estate to raise wayleave charges,

<sup>50</sup> Letter from John Sykes to John Hardy of the Low Moor Ironworks, 15 April 1799. DD/S/I/166, Savile papers, WYAS (K). The Savile family owned the mineral rights in the area as lord of the manor, but the surface was in different ownership.

<sup>51</sup> Letter from James Thompson to Richard Oastler, 16 Nov. 1826. DD/T/C/4, Clarke-Thornhill papers, WYAS (K).

<sup>52</sup> Award dated 10 Feb. 1809 in a dispute between Thomas Thornhill, Sarah Liversedge (surface tenant) and Richard Gaggs and George Wilson (mining lessees), with regard to the Lees Hall colliery lease of 16 Nov. 1787. William Roberts (Farnley Tyas) and Elihu Dickenson (Penistone) arbitrated. DD/T/LP/15, Clarke-Thornhill papers, WYAS (K).

<sup>53</sup> For example, Joseph and George Marriott leased from the Saviles both coal and surface land on Mirfield Moor from 1799 until George's death in 1825. Lease dated 16 Dec. 1799, DD/S/I/123; letter Joseph Cockhill (Savile estate coal factor?) to William Toon, Savile estate agent, 10 Aug. 1825, DD/S/I/124. Savile papers, WYAS (K).

<sup>54</sup> Hartley, 'Five Landed Estates', p. 189; D. Wholmsley, 'Market Forces and Urban Growth: The Influence of the Ramsden Family on the Growth of Huddersfield', *Journal of Regional and Local Studies* [JORALS], 4:2 (Autumn 1984), 32-5.

<sup>55</sup> Lease dated 9 July 1793. DD/S/I/210, Savile papers, WYAS (K); J. Goodchild, 'The Old Flockton Collieries, c. 1772-1893', *British Mining*, 19 (1982), 101.



which in the case of the Inghams was £10 0s.0d. p.a. for a railway or canal once constructed.<sup>56</sup> The Savile estate perhaps took a while to realise the potential of railways; a lease of 1796 with James Milnes of Flockton charged only £2 2s.0d. for the building of 'another' double tram or corf road, and also permitted him to construct 'a new carriage road or waggonway'.<sup>57</sup> In contrast, a 1799 agreement with Milnes, for taking water from a brook and running a fenced 'iron railroad', was for £15 15s.0d. p.a..<sup>58</sup>

The Lister estate at Shibden Hall was an exception to the trend of increasingly complex mineral leases. Coal income was important to the Listers because their land had limited potential for either agricultural or urban development.<sup>59</sup> Shibden agreements defined very precisely the areas to be mined, which were usually small; five leases entered into between 1797 and 1831 were for an average of seven acres each.<sup>60</sup> Otherwise the leases were vague in their provisions, which suggests that issues like damages and wayleaves may have been resolved by informal arrangement and common practice. The estate had extended relationships with a small group of coalmasters so it is possible that familiarity encouraged this approach.<sup>61</sup> Nor did the Lister agreements up to 1830 differentiate between seams; the annual rents were in the range £200-£230 per acre without further qualification.<sup>62</sup> The main seams accessible in the Halifax area were the Upper and Lower Beds, around twenty six and eighteen inches thick respectively, plus the twelve-inch 36 Band seam which was generally worked only on the outcrop as being too thin to justify extraction at greater depth.<sup>63</sup> The estate was therefore receiving, if the 36 Band bed is included, around £4 per inch of seam thickness p.a. for coal sold during the period 1800-1825.<sup>64</sup> Of twelve agreements on other estates in the same period for which the seam thickness was stated, the average price was slightly under £3 per inch.<sup>65</sup> The cost of extraction

<sup>56</sup> Lease dated 9 July 1793. DD/S/I/210, Savile papers, WYAS (K).

<sup>57</sup> Lease dated 1 May 1796. DD/S/I/210, Savile papers, WYAS (K).

<sup>58</sup> Lease dated 16 Dec. 1799. DD/S/I/210, Savile papers, WYAS (K).

<sup>59</sup> Hartley, 'Five Landed Estates', p.195.

<sup>60</sup> Lease dated 1797 for four acres, SH:2/CM/1797; lease dated 22 Mar. 1813 for nine acres, SH:2/CM/1813; lease dated 28 Mar. 1814 for seven acres, SH:2/CM/1814/1-2; lease dated 11 Sept. 1824 for five acres; conveyance dated 4-5 May 1831 for nine acres, SH:2/CM/1831-2. Shibden Hall papers, WYAS (C).

<sup>61</sup> Notably James Walsh, John Oates and John Green.

<sup>62</sup> Lease dated 1797 (no more specific date), SH:2/CM/1797; lease dated 22 Mar. 1813, SH:2/CM/1813; lease dated 28 Mar. 1814, SH:2/CM/1814/1; lease dated 11 Sept. 1824, SH:2/CM/1824; uncompleted lease dated 1833, SH:2/CM/1833. Shibden Hall papers, WYAS (C).

<sup>63</sup> Trigg, 'The Halifax Coalfield, part 1', pp.118-19.

<sup>64</sup> That is, £200-230 per acre rental divided by the total seam thickness of c. 56in.

<sup>65</sup> Lease dated 30 Jan. 1806, DD/S/I/166 (32in seam at £90/acre; 36in seam at £60 per acre; 20in seam at £80 per acre); letters from William Green to Robert Oastler, 12 June 1809 (23in seam at £120 per acre), 24 Dec. 1810 (12in seam at £40 per acre), and 26 Nov. 1811 (12in seam at £26 per acre), DD/T/C/3; lease dated 30 June 1810 (20in seam at £84 per acre), DD/T/L/XLIII/4; lease dated 1823 (19in seam at £60 per acre); submission to Chancery dated 7 Mar. 1812 (32in seam at £90 per acre; 36in seam at £60 per acre; 12in seam at £40 per acre), DD/S/I/168; lease dated 15 Sept. 1812 (10in seam at £80 per acre), KC165/369. Savile, Clarke-Thornhill, and Crosland and Fenton papers, WYAS (K).



and market value of the coal would have differed at each location, but it seems likely that the Lister estate, despite its apparently old-fashioned commercial arrangements, was selling its coal for a price comparable to that obtained by other landowners. The Lister family was inclined to manage the mining on its land directly rather than lease the coal, and this entrepreneurial approach was reinforced when Anne Lister retained James Holt as her coal steward (c. 1830).<sup>66</sup> Lister was intensely proud of her family's long ownership of Shibden, and perhaps as a result preferred to maintain personal control; commercial sense and individual preference directed to the same strategy.<sup>67</sup>

Landowners with mineral reserves were keen to ensure that they gained the financial benefit of those resources, and by leasing the extraction rights they could use legal structures familiar from agricultural practice. Initially, the level of production was often restricted by the lease, although from the early nineteenth century mining tenants generally had a freer hand in this regard. At the same time the collateral interests of landlords were increasingly protected by lease provisions, and landowners (or their agents) displayed flexibility and commercial nous in maximising their income. However, the success of a leasing arrangement is dependent on both lessor and lessee, and the following section will consider who the mining tenants were and how they interacted with their landlords.

#### TENANTS, TECHNIQUES AND TONNAGE

Mining tenants came from a variety of backgrounds. In only nine of thirty one agreements examined for this study was at least one of the lessees described as a 'coal miner', and in only three agreements were all lessees so defined.<sup>68</sup> Coal mining clearly attracted finance from other economic spheres, individuals with spare capital and a willingness to take risk.<sup>69</sup> These entrepreneurs could originate from the professions or traditional trades, or be from a land-owning background. Coal end-users and wholesalers were also represented. During the early development of the Yorkshire coalfield, practical managerial experience of large-scale mining was at a premium. Richard Milnes remarked ruefully that:

It is a very singular fact, that the master colliers in this part [of the country], have

<sup>66</sup> Hartley, 'Five Landed Estates', pp.195-6;

<sup>67</sup> J. Liddington, 'Beating the Inheritance Bounds: Anne Lister (1791-1840) and her Dynastic Identity', *Gender and History*, 7:2 (Aug.1995), 264.

<sup>68</sup> See Appendix 1, which shows the occupations of sixty four lessees of coal and ironstone named in thirty one agreements made between 1735 and 1824.

<sup>69</sup> It is probable that the need to have a taste for risk sometimes only became apparent after the investment had been made. Richard Milnes, a late eighteenth-century West Riding coal-master, told the story '...of a south country gentleman, who had spent £10,000 in pursuit of lead and the same sum in pursuit of coal, and still unfortunate. He was coming to Yorkshire through a village in the south, and heard a pig cry very bitterly; he met a farmer at the moment and said to him, Pray, what is the matter with that pig? He said, They are ringing its nose, Sir. Pray, what is that for? said the gentleman. The farmer answered, To keep him from rooting in the earth, Sir. The gentleman shook his head, and said, I wish I had been rung twenty years ago.' R. Milnes, *The Warning Voice of a Hermit Abroad* (Wakefield, 1825), p.6.



generally begun this trade in ignorance, without going apprentice, as boys do to all other trades, which is the only way I can account for so many losing money or miscarrying.<sup>70</sup>

The skills required at both managerial and coal-hewing level were considered, even by their possessors, to be essentially craft-based. Little technical literature on mining was written in English in the eighteenth century and skills must have been passed on by example and practical apprenticeship.<sup>71</sup> Proficiency in getting large coals without waste or dust was highly valued and good face-workers were enticed into new pits through high wages and additional benefits.<sup>72</sup> Those entrepreneurs entering an unfamiliar industry must have had to buy in expertise if it was not present in the partnership.

Such expertise lay in the estates that had been working coal in a small way for many years, as, prior to 1800, mining had often been combined with agriculture in terms both of land use and labour.<sup>73</sup> Coalmasters might develop from men who had begun as farmers with a sideline in mining. The Fenton family, the 'Coal Kings' and promoters of canals, metal smelting and other businesses, had origins as yeoman landowners.<sup>74</sup> At least three generations of the Woodhead family of Shelf leased coal from the Saviles until the early nineteenth century when the Bowling Iron Works and the Low Moor Company took up the mining rights in the area.<sup>75</sup> The Shelf area therefore followed a trajectory in terms of mine leasing, from small enterprises run by local men, through a period when local coalmasters (exemplified by the Woodhead family) developed the expertise and capital to invest significant sums in larger ventures, culminating in the entry of the large Bowling Ironworks and Low Moor Company organisations, seeking out local sources of raw material and paying well for them.

Whatever the size of the operation, mining was a risky undertaking and the tenant was in the front line. Mining lessees who found themselves in financial difficulties perpetuated the agricultural tenant's practice of appealing to the landlord for rent reductions.<sup>76</sup> Landlords no doubt felt that mining tenants were too willing to ask for

<sup>70</sup> Milnes, *Warning Voice*, p.3.

<sup>71</sup> J. R. Harris identified only two books 'of value'; John Curr's *The Coal Viewer and Engine Builder's Practical Companion* (1797), in which Curr describes himself as 'merely a mechanic', and *The Compleat Collier* by 'J. C.' (1707). J. R. Harris, 'Skills, Coal and British Industry in the Eighteenth Century', *History*, 61 (1976), 170-1.

<sup>72</sup> For example, an advertisement from the Parr Colliery, Warrington, in the *Liverpool Chronicle* of 3 November 1768, for 'Twenty colliers, industrious sober men...who will undertake work in the long work way...good lodgings will be immediately provided [or] houses will be provided for in a decent manner...'. Long wall working was not the general practice in Lancashire at the time, so the owners of Parr Colliery were attempting to introduce a more efficient technique by attracting skilled workers, rather than by implementing the change through managerial direction. Harris, 'Skills, Coal and British Industry', pp.171-2.

<sup>73</sup> Hartley, 'Five Landed Estates', pp.188, 197; , B. Lewis, *Coal Mining in the Eighteenth and Nineteenth Centuries* (London 1971), p.19.

<sup>74</sup> J. Goodchild, *The Coal Kings of Yorkshire* (Wakefield, 1978), pp.5-6; Lewis, *Coal Mining*, p.40.

<sup>75</sup> However, the family connection was probably maintained when a William Woodhead became the Shelf agent for the Low Moor Company in 1825. Correspondence, leases and evidentiary statements in the Savile papers. DD/S/I/166 and 168, Savile papers, WYAS (K).

rent reductions when they should rather be running their businesses more efficiently, while the lessees' view of the matter was crystallised by Joseph Dawson:

The fact is that opening mines are so expensive and their produce so uncertain that great indulgences ought to be allowed to them.<sup>77</sup>

Matthew Jagger, a tenant of the Saviles, requested 'heasment' in the rent as he was having difficulty in selling his coal and had been able to extract only one acre of coal in that year (1820).<sup>78</sup> George Marriott had a history of delayed payment of rental on the Savile land which he mined on Mirfield Moor. By 1823 he owed nearly £600 and had been sent two letters by the Savile estate agent, William Toon, threatening legal action.<sup>79</sup>

Tenants could establish a relationship with the landowner's agent or go straight to the top, using the landlord as a court of appeal. James Hinchliff wrote directly to Thomas Thornhill, bypassing Thornhill's agent Robert Oastler. He had begun mining four years before on a letter of sanction from Oastler, who had refused to sign a lease. Hinchliff had now found that getting the coal would be more expensive than he had expected, and wanted the security of a formal agreement.<sup>80</sup> Hinchliff's letter was expressed in deferential terms. Few lessees were prepared to use the bluff man-to-man tone adopted by Joseph Dawson, clergyman and successful businessman, in writing to Walter Spencer-Stanhope. Dawson was both soliciting a meeting with Spencer-Stanhope and pre-empting its outcome:

I am pretty sure, from our past experience, [that] when that conversation takes place we shall be able to satisfy each other that nothing materially wrong has either been done or intended to be done.<sup>81</sup>

<sup>76</sup> On the Thornhill estate, Elizabeth Vernon seemed to apply regularly for assistance with her farm rental; her 1837 letter requesting compensation for crops damaged by mining to the considerable alleged value of £106 0s.0d. has a note written on it saying '£40 as before' and has enclosed with it her letter of the previous year asking for compensation for crops damaged by an overflowing river. 'Humble petition' of Elizabeth Vernon to Thomas Thornhill dated 18 Feb. 1837. DD/T/C/4; Clarke-Thornhill papers, WYAS (K).

<sup>77</sup> Copy letter from Joseph Dawson and Walter Spencer-Stanhope (but written by Dawson) to Cawthorne Poor Law Guardians, 17 Nov. 1803. 60579/8, Spencer-Stanhope papers, SCA. The landowner's riposte was put by George Leather, the Spencer-Stanhope coal factor: 'I warned him [Dawson] against too great an Establishment and strongly recommended a frugal management in which he appeared to acquiesce.' Letter from George Leather to Walter Spencer-Stanhope, 6 Feb. 1807. 60579/18, Spencer-Stanhope papers, SCA.

<sup>78</sup> Letter from William Sellers, Savile estate coal factor, to William Toon, agent for the estate, dated 26 Sept. 1820. DD/S/I/24, Savile papers, WYAS (K).

<sup>79</sup> Letters from William Toon to Geoffrey Marriott, 28 Mar. 1823 and 15 Dec. 1823, and account with Marriott, 17 Oct. 1823. DD/S/I/24, Savile papers, WYAS (K).

<sup>80</sup> Letters Robert Oastler to James Hinchliff, 11 Aug. 1813, and James Hinchliff to Thomas Thornhill, 6 April 1818. DD/T/C/3. Clarke-Thornhill papers, WYAS (K).

<sup>81</sup> Letter from Joseph Dawson to Walter Spencer-Stanhope, 20 July 1807. 60579/20, Spencer-Stanhope papers, SCA.



In his case at least, some cracks were beginning to appear in the deference shown to landowners by tenants.<sup>82</sup>

Landlords also needed the benefit of mining expertise and commonly engaged advisors with experience of the coal industry, much as they would employ an agricultural agent. At the beginning of his employment as coal advisor to the Thornhill estate, William Green stressed his practical knowledge in a letter to the Thornhill agent:

As you cannot understand the working part so well as myself therefore if that there is anything at any time that you want clearing up unto you only mention it unto me and I will give you the best information that I can do at any time and will be glad for to do so.<sup>83</sup>

This knowledge might be gained through experience of mine management from the landowner's perspective, as it was by John Hardy, agent to the Spencer-Stanhope estate.<sup>84</sup> Alternatively, expertise at either managerial or coalface levels could be brought in from other coalfields, particularly that of north-eastern England; John Curr, coal viewer to the Duke of Norfolk's south Yorkshire estate, was a highly-regarded mining engineer from County Durham, and the Danby estate made repeated attempts to recruit experienced miners from the north east to enhance the expertise available to its operations in Nidderdale.<sup>85</sup> Local men with practical experience might also be employed, such as Thomas Bedford of Morley.<sup>86</sup> The Spencer-Stanhope and Whitley Beaumont estate also employed advisors with mining experience.<sup>87</sup> The Listers

<sup>82</sup> Joseph Dawson had a taste for the sonorous epigram in his correspondence. His 1806 letter to Walter Spencer-Stanhope requesting a reduction in the rent of the colliery at Cawthorne begins: 'In difficult circumstances it is wise to apply to those who are likely to assist in removing them', and the tone throughout is that of a judicious debate between equals, rather than the reality: a begging letter to ask a landlord to permit his tenants to pay less than the sum which they had contracted to be liable for. Letter from Joseph Dawson to Walter Spencer-Stanhope, 28 Mar. 1806. 60579/14, Spencer-Stanhope papers, SCA.

<sup>83</sup> Of course, Green had little to lose by talking up his own expertise. William Green to Robert Oastler, 13 May 1809. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>84</sup> A further example was Joshua Biram, house steward and later collieries superintendent to Earl Fitzwilliam. Firth, 'The Roles of a West Riding Land Steward', p. 106; J. T. Ward, 'The Earls Fitzwilliam and the Wentworth Woodhouse Estate in the Nineteenth Century', *Yorkshire Bulletin of Economic and Social Research*, 12 (1960), 22; G. Mee, *Aristocratic Enterprise: The Fitzwilliam Industrial Undertakings 1795-1857* (Glasgow, 1975), pp. 96-7.<sup>85</sup> I. R. Medlicott, 'The Development of Coal Mining on the Norfolk and Rockingham-Fitzwilliam Estates in South Yorkshire, 1750-1830', *YAJ*, 59 (1987), 109; L. O. Tyson, 'Mashamshire Collieries', *British Mining* (April 2007), 66 and 88.

<sup>86</sup> William Green (Thornhill estate) had postal addresses in Yorkshire (Low Moor and Bailiff Bridge) and his written style suggests that he was a local man.

<sup>87</sup> George Leather (father and son) at Cannon Hall; Thomas Bedford measured coal for the Whitley Beaumont estate in 1828-1830, as well as working for the Earl of Dartmouth. DD/WBE/1/343, Whitley Beaumont papers, WYAS (K).

appeared not to have done so until Anne Lister engaged James Holt around 1830, which may explain the survival of the agrarian style in the estate's leases and attitude to its mining personnel.<sup>88</sup> The relationship between landowners and mining advisors seems often to have been difficult, possibly because of landowners' unrealistic expectations of the return that they could get from their minerals, combined with the inherently uncertain nature of mining. The Hardys and Birams spent generations in the service of the Spencer-Stanhope and Fitzwilliam families respectively, but the obscure Green on the Thornhill estate and the celebrated Curr for the Duke of Norfolk were discharged by their employers.<sup>89</sup>

Landowners without expert advice appear on occasion to have been naive in dealing with coal leases and entrepreneurial coalmasters. William Green advised the Thornhill estate on several occasions on the issues that should be covered in a mining lease.<sup>90</sup> George Leather junior, son of the coal factor to Walter Spencer-Stanhope, remarked frankly in a letter that it was:

a great pity Mr Stanhope had not the assistance of a person conversant in Collieries when the lease was made as for want of that he seems to be tied in a very disagreeable manner as in all his experience [my father] never saw such a lease of a colliery.<sup>91</sup>

Green urged the Thornhill estate to be 'sharp' with two of its lessees or they would not pay because 'they are two strange men'.<sup>92</sup> He also warned the estate that a prospective tenant was likely to be keener in negotiating than in actually extracting the coal: 'Jennings is a very good one at making an agreement for his own side but he does not push forwards in getting'.<sup>93</sup> Green was counselling the Thornhill land agent to expect the relationship with Jennings to be adversarial rather than deferential.

Supported by advisors like Green, landowners were concerned to protect their coal income and wider interests.<sup>94</sup> On the Spencer-Stanhope estate, Joseph Dawson

<sup>88</sup> Liddington, 'Gender, Authority and Mining', pp.66-7.

<sup>89</sup> In 1812, Oastler wrote to Green that 'Mr Thornhill being dissatisfied with what you have done respecting his Collieries, I desire you will send me his account as to what he is indebted to you'. Robert Oastler to William Green, 14 Oct.1812. DD/T/C/3, Clarke-Thornhill papers, WYAS (K). The cause of Thornhill's dissatisfaction is not recorded; the duke of Norfolk's decision to dispense with John Curr arose from poor financial performance of his pits. Medlicott, 'The Development of Coal Mining', pp.116-17; Firth, 'The Roles of a West Riding Land Steward', pp.107-10.

<sup>90</sup> *Inter alia* in letters dated 13 May 1809, 17 June 1809 and 25/2/1811. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>91</sup> George Leather junior to Walter Spencer-Stanhope, 11 Feb.1807. 60579/17, Spencer-Stanhope papers, SCA. George Leather senior was unable to write because of illness.

<sup>92</sup> Letter from William Green to Robert Oastler, 18 Sept.1812. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>93</sup> Letter from William Green to Robert Oastler, 12 June 1809. DD/T/C/3, Clarke-Thornhill papers, WYAS (K).

<sup>94</sup> Even on the paternalistic Fitzwilliam estate, Henry Hartop, a former manager of the Elsecar ironworks, conducted a campaign to persuade the estate to adopt a less lenient attitude towards erring mining employees. Gee, *Aristocratic Enterprise*, p.165.



sought to ease Cawthorne Colliery's financial difficulties by asking permission to cease working a seam which the lease required it to mine.<sup>95</sup> George Leather favoured this proposal, so that the lessees would remain in business for a time at least and introduce the estate's coal to the market. This would make it easier to lease the coal to a more commercially viable operation following the likely demise of Dawson's mine:

Upon considering this part of the business I think it will be the best to let them try; if they should not succeed in working the colliery to profit they may establish the character of the coal in the market which will greatly facilitate its future success.<sup>96</sup>

As mining metamorphosed from an estate-based rural occupation into a major industry, so the attitudes of landowners came to more closely resemble the brisk tone of businessmen. Leather's desire to test-market the estate's coal underlines the importance to coal-owning landlords of meeting market needs, and of ensuring that the coal got to market efficiently and economically. These aspects became more crucial as Yorkshire coal production expanded.

Over the period 1750 to 1830, the output of the Yorkshire coalfield increased fivefold. Production was concentrated in the west, as the exploitation of the deep beds in the Barnsley area did not begin until the 1840s.<sup>97</sup> Appendix 2, Tables 1 and 2 give estimates of coal production in Yorkshire, 1750-1830, and of its usage in the first half of the nineteenth century. The overall increase in demand for coal was influenced by a number of factors. Domestic usage rose because of population growth and urbanisation, although it lost ground as a proportion of all consumption, as coal was increasingly used for industrial purposes.<sup>98</sup> A series of technical advances enabled the use of coal-based products in iron-making, from which west Yorkshire colliers benefited as the local ironstone beds had fostered an iron industry. In particular, demand rose because of the increasing use of the industrial steam engine, although that growth took place relatively late in west Yorkshire.<sup>99</sup> The predominant eighteenth century user of the steam engine was the mining industry, but Pennine pits of that date rarely had the level of production or depth of shaft to justify the expense of a steam engine; as Anne Lister expressed it as late as 1832, 'No coals here will pay for much pumping'.<sup>100</sup> Similarly, in the early nineteenth century power for

<sup>95</sup> Letter from Joseph Dawson to Walter Spencer-Stanhope, 20 Jan.1807. 60579/17, Spencer-Stanhope papers, SCA.

<sup>96</sup> Letter from George Leather (senior) to Walter Spencer-Stanhope, 6 Feb.1807. 60579/18, Spencer-Stanhope papers, SCA. Also on the Spencer-Stanhope estate, the land agent had proposed that land be provided for the construction of a staithe on which good quality imported coal would be landed, undermining the competitiveness of an estate tenant's colliery. See above, p.4.

<sup>97</sup> S. Pollard, 'A new estimate of British Coal Production 1750-1850', *Economic History Review* [*EcHR*], 33:2 (May 1980), 227.

<sup>98</sup> Mitchell, *Economic Development of the British Coal Industry*, pp.16-17.

<sup>99</sup> Lewis, *Coal Mining*, pp.16-17; Flinn and Stoker, *The History of the British Coal Industry*, vol. 2, pp.240-1.

<sup>100</sup> Quoted in Liddington, 'Gender, Authority and Mining', p.66.

industry was mainly provided by human or equine muscle or by water, the latter of which the Pennine climate and topography were well equipped to provide.<sup>101</sup> The introduction of the steam engine was also delayed by the difficulty of transporting heavy, bulky articles, and the lag of technology transfer of steam power from the cotton to the worsted industries, the latter being predominant in the Halifax area in particular.<sup>102</sup> Despite these delaying factors, by 1840 there was a marked acceleration in the use of steam technology by West Riding manufacturers and the number of engines in operation by the woollen textile industry rose from 604 in 1838 to 13,000 in 1850.<sup>103</sup>

In an era of expanding markets and rapidly increasing consumption, coal mining attracted both profit-seeking entrepreneurs and industrialists who wished to secure their supply chain. The landlord and the tenant coalmaster had equally to develop or buy-in technical and commercial expertise in order to participate successfully in an increasingly complex and capital-intensive industry that was breaking free from its agricultural roots. However, once the coal had reached the surface, both parties had to address the further challenge of getting the product to the customer.

## MARKETS AND TRANSPORT

The extent to which coal-owners could develop the capacity of their pits was strongly influenced by physical access to markets. In the pre-canal era, coal could not usually be transported overland for more than ten miles, as this would double its cost: 'the consumer's choice was determined almost entirely by the distance from which his fuel had to be fetched, and scarcely at all by the pithead price'.<sup>104</sup> In 1832 Anne Lister calculated that the pithead cost of raising coal from her mines was around 3½d per two hundredweight corf. The charge for carting into Halifax was 1d, an addition to the pithead cost of 30 per cent for a distance of barely two miles.<sup>105</sup> Similarly, in 1800 the two mile journey to Armley and Headingley added a third to the price of coal from Middleton Colliery, delivered by rail to the staithe close to Leeds town centre.<sup>106</sup> In Pennine Yorkshire coal often had to be transported by packhorse because of the gradients, so that even the efficiencies of wheeled transport might not be available to the collier.<sup>107</sup>

<sup>101</sup> J. R. Harris's initial estimate was that around 1350 steam engines were in use during the eighteenth century, including only a small number for Yorkshire, mostly around Leeds and Sheffield. Harris later revised this estimate to over 2,000, of which half were employed at coal mines. J. R. Harris, 'The Employment of Steam Power in the Eighteenth Century', *History* 52 (1967), 141-4; Harris, 'Skills, Coal and British Industry', p. 170.

<sup>102</sup> P. Hudson, *The Genesis of Industrial Capital: A Study of the West Riding Wool Textile Industry c. 1750-1850* (Cambridge, 1986), pp. 35-9.

<sup>103</sup> W. P. Hartley, 'The Development of Coal Mining in the Heavy Woollen District of West Yorkshire During the Nineteenth Century', *JORALS*, 14: 1 (Autumn 1994), 25.

<sup>104</sup> J. U. Nef, *The Rise of the British Coal Industry* (London, 1966), p.359.

<sup>105</sup> Liddington, 'Gender, Authority and Mining', pp.67-8.

<sup>106</sup> G. Turnbull, 'Canals, Coal and Regional Growth during the Industrial Revolution', *EcHR* 40:4 (1987), 544.

<sup>107</sup> A. R. Griffin, *The British Coalmining Industry: Retrospect and Prospect* (Hartington, 1977), p.128.



Proximity to customers was a major consideration; hence the Thornhill estate held out for a higher price from a prospective lessee because its coal was two miles closer to an ironworks than that of another landowner.<sup>108</sup> Colliery owners and landowners often supported the turnpike trusts which improved major roads in the second half of the eighteenth century and enabled the average load size to be increased by up to a third.<sup>109</sup> Despite this, road transport remained expensive in comparison to canals. This was exacerbated in west Yorkshire as the Aire and Calder Navigation Company was adept at hamstringing turnpike acts by inserting toll exemption provisions which starved the turnpikes of funds for improvements.<sup>110</sup>

Before the railways, water was the cheapest and most efficient medium for the carriage of a bulky and heavy commodity, particularly one with a low value relative to weight.<sup>111</sup> A mine near a navigable inland waterway could gain access to markets which might enable it to become a major producer. Coalfields with maritime access could supply distant markets, as north east England did London and cities on the European seaboard.<sup>112</sup> The cost reduction achievable by the use of water transport and reflected, to a greater or lesser degree, in the price, could be very considerable: 50 per cent in the case of the Worsley canal into Manchester.<sup>113</sup>

Canal construction was often driven by the expectation of profit from the transportation of coal, lime and grain, and coal owners often helped finance new canal construction: 34 per cent of the share capital of the Barnsley canal was subscribed by local landowners looking to grow their revenues from the expansion of mining.<sup>114</sup> Landowners as a class were major investors in canal companies, and during the period 1760-1815 contributed up to a third of the capital subscribed for canals. The Duke of Bridgewater summarised this linkage succinctly: 'A navigation should always have coal at the heels of it'. Ninety of the 165 canal acts passed in the period 1758-1801 did indeed envisage coal as the primary commodity to be carried.<sup>115</sup> Those coalfields with access to navigable rivers, such as the Leeds/Wakefield

<sup>108</sup> See above, p.228.

<sup>109</sup> Griffin, *The British Coalmining Industry*, p.130; Flinn and Stoker, *The History of the British Coal Industry*, vol. 2, p.148.

<sup>110</sup> For example the Leeds-Selby and Wakefield-Weeland acts of 1741. R. Unwin, 'The Transport Systems of the Vale of York, 1660-1775', *Journal of Transport History* 3 ser., 2:2 (September 1981), 31.

<sup>111</sup> Flinn and Stoker, *The History of the British Coal Industry*, vol. 2, p.146, quotes R. Davis, *The Rise of the English Shipping Industry in the Seventeenth and Eighteenth Centuries* (London, 1962), p.177, as calculating the average value of one ton of coal in the mid eighteenth century to be less than £1 0s.0d.

<sup>112</sup> *House of Commons Report on the State of the Coal Trade, 1800*, p.613.

<sup>113</sup> Griffin, *The British Coalmining Industry*, p.127; Flinn and Stoker, *The History of the British Coal Industry*, vol. 2, p.146; Lewis, *Coal Mining*, p.20.

<sup>114</sup> Hudson, *The Industrial Revolution*, pp.90-1; J. R. Ward, *The Finance of Canal Building in Eighteenth Century England* (Oxford, 1974), pp.42-3.

<sup>115</sup> Duke of Bridgewater quoted in Lewis, *Coal Mining*, p.20; Hudson, *The Industrial Revolution*, p.92.

area close to the navigable Aire and Calder, were early developers of coal reserves. Coal output expanded as navigable waterways extended further into the coalfield and opened up markets beyond a mine's immediate hinterland. By the late-eighteenth century canals and navigable rivers had reached much of the Aire, Ouse, Trent and Calder basins. Bigger markets encouraged higher levels of investment in developing mineral resources, so that deeper seams could be reached and problems of drainage and ventilation could be overcome.<sup>116</sup>

Transport costs might become the focus of negotiation between an estate and its mining tenants. In 1806 the difficulties experienced by the proprietors of the Cawthorne Colliery (who claimed to have lost £46,000) on the Cannon Hall estate prompted Joseph Dawson, on behalf of his fellow lessees, to write to Walter Spencer-Stanhope to request him to reduce the £600 annual rental on the colliery and, in Spencer-Stanhope's role as chairman of the Barnsley Canal, to bring about a decrease in canal carriage rates.<sup>117</sup> Although Cawthorne was reasonably close to the canal, it was not directly on it and additional cost was therefore incurred in reaching the water. Dawson wanted the Canal to reduce its charges by 1/6d per load. He assured Spencer-Stanhope that his estate's coal was of excellent quality, but claimed that it was being priced out of the market by collieries which had direct access to the Aire-Calder Navigation.<sup>118</sup> Dawson reinforced the argument by stating that he and his partners had only agreed to take the colliery at the annual rental of £600 because of the expectation, not at that point realised, that the Barnsley Canal would be sufficiently deep for boats carrying thirty tons of coal, which would reduce the average transport cost by weight.<sup>119</sup> Dawson appealed directly to Spencer-Stanhope's self-interest; the proprietors of the Leeds and Liverpool Canal, he claimed:

have a right to take 4/10d for every ton of Coal that go upon it from the Banks of the Douglas to Liverpool. But to encourage the trade, for a number of years, they have contented themselves with taking 1/6d. Under this encouragement the coal trade increased, the demand also increased...the proprietors of the Coal Mines can now afford to pay the Proprietors of the Canal 3/9d per ton. Just so will it be with the Barnsley Canal Company and the same observations apply to yourself. The Best Coal that goes upon the Water is from your estate. But its worth is not yet known. It must therefore be sold at the same price as others and for this price it cannot be brought to the market.<sup>120</sup>

<sup>116</sup> Lewis, *Coal Mining*, p.19.

<sup>117</sup> Copy letter from Joseph Dawson and Walter Spencer-Stanhope (but written by Dawson) to Cawthorne Poor Law Guardians, 17 Nov.1803. 60579/8, Spencer-Stanhope papers, SCA.

<sup>118</sup> Letters from Joseph Dawson to Walter Spencer-Stanhope, 28 Mar.1806 and 4 April 1806. 60579/14-15, Spencer-Stanhope papers, SCA.

<sup>119</sup> Letter from Joseph Dawson to Walter Spencer-Stanhope, n.d. [1806?]. 60579/25, Spencer-Stanhope papers, SCA. Shortage of water was a continuing problem on the Barnsley Canal. C. Hadfield, *The Canals of Yorkshire and North East England*, vol. 1 (Newton Abbot, 1972), p.174.

<sup>120</sup> Letter from Joseph Dawson to Walter Spencer-Stanhope, 28 Mar.1806. 60579/14, Spencer-Stanhope papers, SCA.



The estate's coal agent agreed that 'it is impossible with the best management to make it [the Silkstone seam] pay for working' but the canal rate reduction was not forthcoming, probably as the proposal had little appeal to a canal company which was itself in financial difficulty.<sup>121</sup>

Landowners in relatively unproductive or high cost coalfields could be less enthusiastic about canals, which they might see as a threat to their local market. The original proposals for the Calder and Hebble Navigation had been opposed by local land- and mill-owners, fearful of the canal's effect on river levels and the revenues of local turnpike trusts, and the successful second scheme received very limited support from the landed class.<sup>122</sup> When the Halifax branch was completed in 1828, Anne Lister commented that the canal meant that 'the sale of home coals must therefore be injured' in competition with coal from large mines in the Leeds/Wakefield area.<sup>123</sup> These fears were alleviated both by the huge growth in demand for coal in the town resulting from the increase in the use of steam power, and by the 'insulating' effect of the distance from large producers.<sup>124</sup> By 1838 Lister had reached a more optimistic view of the prospect for her coal reserves: 'We shall do all by steam, from carrying ourselves to boiling our potatoes. But they must have coal to have steam'.<sup>125</sup>

West Riding coal owners were alert to the advantages of a link to the water for access to local towns or for participation in regional markets, and an 1831 account noted at least nine railway connections to the Aire-Calder Navigation.<sup>126</sup> In 1793 a lease for a colliery at Thornhill near Dewsbury included a clause permitting the construction of a waggonway or a subterranean canal from the pit to the River Calder, and there is evidence that an underground waterway connection was built between the pit and the river, presumably in emulation of the Bridgewater mines near Manchester.<sup>127</sup> Middleton Colliery had a very early railway link (1758) to the River Aire, and, as will be discussed

<sup>121</sup> Letter from George Leather to Walter Spencer-Stanhope, 11 Feb. 1807. 60579/19, Spencer-Stanhope papers, SCA; Hadfield, *The Canals of Yorkshire and North East England*, vol. 1, pp. 175-6.

<sup>122</sup> Ward, *The Finance of Canal Building*, pp. 13-14; C. Hadfield, *The Canals of Yorkshire and North East England*, vol. 2 (Newton Abbot, 1973), p. 45.

<sup>123</sup> Quoted in Liddington, 'Gender, Authority and Mining', p. 66.

<sup>124</sup> See below, pp. 33-5.

<sup>125</sup> Quoted in Liddington, 'Gender, Authority and Mining', p. 75. A similar acknowledgement of the strength of the concept of the power and utility of steam in the nineteenth century mind is expressed in the opening to Kipling's poem 'McAndrew's Hymn' (published 1896), in which an ageing Scots ship's engineer likens the steam-driven marine engine to divine omnipotence: 'Lord, Thou hast made this world below the shadow of a dream/An', taught by time, I tak' it so - exceptin' always Steam/From coupler-flange to spindle-guide I see Thy Hand, O God/Predestination in the stride of yon connecting-rod'. J. Hewitt (ed.), *Everyman's Poetry: Rudyard Kipling* (London, 1998), p. 9.

<sup>126</sup> J. Priestley's *Historical Account of the Navigable Rivers, Canals and Railways of Great Britain* (1831), quoted in R. G. Wilson, 'The Aire and Calder Navigation part IV; The Navigation in the First Half of the Nineteenth Century', *Bradford Antiquary* XLV (June 1971), 333-4. At least two tramroads were built to gain access to the Barnsley Canal. Hadfield, *The Canals of Yorkshire and North East England*, vol. 1, pp. 174-6.

<sup>127</sup> Lease of 9 July 1793. DD/S/I/210, Savile papers, WYAS (K); J. Goodchild, 'The Inghams and the Thornhill Collieries near Dewsbury', *British Mining* 19 (1982), 81-2.



below, the Milnes family invested heavily in a rail connection to the canal system from its pits near Flockton.<sup>128</sup> Once the canal trade was established, West Riding coal competed effectively against coastal imports from north-eastern England in Humber estuary towns.<sup>129</sup>

The range of strategies available to landowners and their mining tenants in getting the coal out of the ground, transported to market and profitably sold will be illustrated by the responses of Anne Lister at Shibden Hall, the Savile estate at Shelf and the Milnes family, Flockton coalmasters. The Lister estate's opportunity lay in its proximity to Halifax. Despite Anne Lister's concerns about the vulnerability of local pits to higher quality 'imported' coal, the short distance to market of small scale Halifax collieries enabled them to compete with outside suppliers, as long as production costs were kept low. Lister could mine thin but shallow seams at 3½d per two hundredweight corf raised, pay 1d for carting into Halifax, and sell at 8d-9d per corf, giving a profit of 80-100 per cent on cost.<sup>130</sup> At the same period, the average production cost of deep-mine Middleton coal was 5.2d per two hundredweight.<sup>131</sup> Carriage rates on the Aire-Calder Navigation for coal were ½d per ton per mile. To reach Halifax, Middleton coal had to be worked 16½ miles along the Aire-Calder Navigation to the junction at Wakefield with the Calder and Hebble canal, incurring a carriage cost of 8d per ton. The Calder-Hebble charged 2/0½d per ton for traversing its full length to reach Halifax.<sup>132</sup> The total carriage cost for a ton of coal from the Leeds area was therefore about 2s.8d., or 3d.-3½d. per corf of two hundredweight including carting from the wharf. A profit margin of around 25 per cent on cost would give a selling price of not less than 10d per corf; hence Lister's ability to sell at 8d-9d with a strong margin. The carriage premium applicable to coal mined outside the Halifax area enabled a relatively high average price to be attained. Although coal from locations nearer to Halifax than Middleton would obviously incur lower transport costs, local producers would usually have enjoyed a 'buffer' of 2d.-3d. per corf because of Halifax's location. Thin-seam outcrop or shallow depth coal could be mined in an unsophisticated manner (albeit with the probability of early exhaustion), and compete successfully with large, capital-intensive, deep-mine producers from outside the locality.<sup>133</sup> Anne Lister had in 1836

<sup>128</sup> Rimmer, 'Middleton Colliery', pp.42-3; Middleton Railway Trust, *A History of the Middleton Railway, Leeds* (Leeds, 1994), pp.7-9.

<sup>129</sup> Unwin, 'The Transport Systems of the Vale of York', p.29; W. G. East, 'The Port of Kingston-upon-Hull during the Industrial Revolution', *Economica* 32 (May 1931), 208.

<sup>130</sup> Anne Lister's diary for 21 July 1832, quoted in Liddington, 'Gender, Authority and Mining', pp.67-8.

<sup>131</sup> Statistics from Appendices I-III, Rimmer, 'Middleton Colliery', pp.54-7. The figures are for 1830-1831 and 1836; no statistics are given for 1832.

<sup>132</sup> Carriage rates on the Aire-Calder and Calder and Hebble Navigations are taken from the reproduction of J. Priestley, *Historical Account of the Navigable Rivers, Canals and Railways of Great Britain* (1831) at <http://www.jim-shead.com> (accessed 27 May 2007). The distances on the canals are taken from the same website.

<sup>133</sup> The need for economy in working the thin seams resulted in the widespread use of child labour in the Halifax area which was described in the report of the Commissioners on the Employment of Children in 1842. Of one group of boy and girl hurriers, the Sub-Commissioner remarked: 'I could not have believed that I should have found human nature so degraded'. *Children's Employment Commission, First Report of the Commissioner of Mines: Children's Employment (Mines) 1842*, p.80.



resolved that her strategy would be that of 'Keeping the colliery in my own hands at least until I see what it is worth', a significant reversal of her view of ten years previous.<sup>134</sup> In so doing, she took the full financial benefit and risk of the mining operation. In the event of success, the returns were likely to be significantly higher (although less predictable) than those from leasing out the coal.

The Savile estate in Shelf was equidistant from Bradford and Halifax, and was therefore at a disadvantage in those towns' domestic and industrial markets in comparison with more local producers. However, it had the benefit of ironstone beds co-located with coal suitable for metallurgical use.<sup>135</sup> From the early nineteenth century, the estate entered into an increasingly close relationship with the two leading ironworks in Bradford (the Bowling and the Low Moor), which were willing to lease both the coal and the ironstone reserves and therefore had the incentive to invest in a transport system to carry the minerals to their premises. This gave the additional potential benefit to the estate of revenue from wayleaves, and an apparent disadvantage of location was overcome by the circumstance of the availability of coal and ironstone, and industrial consumers who had an interest in both minerals.<sup>136</sup>

For the Milnes family at Flockton, the early adoption of a new transport technology enabled a disadvantageous location to be overcome. The Milnes leased coal from the Saviles and other landowners, and built a railway (initially a wooden plateway) between the pits and a staithe on the Calder-Hebble Navigation. The terrain was favourable, as the three-mile descent to the water was less steep than the hillsides in up-river Pennine valleys and the loaded wagons ran downhill.<sup>137</sup> The railway was probably constructed in the period 1775-1780.<sup>138</sup> Richard Milnes, one of the owners, later wrote that the capital cost was not justified at that time:

And being all ignorant and inexperienced in collieries, we soon laid out six thousand pounds in opening this colliery and laying out a Newcastle waggonway with wood....but this was the greatest folly, because a turnpike road lay on one side of it, and being made of wood, our returns at that time would not in any degree justify the expense of making a wooden road and repairing of it with wood....I do think with the hard and long experience I have since gained, I could establish the same work with little more than twice six thousand shillings [£600].<sup>139</sup>

Milnes' comments seem to imply that moving the coal on the turnpike would have been 'free': clearly it would not. The costs of hiring transport or buying and

<sup>134</sup> Anne Lister's diary for 27 Dec.1836, quoted in Liddington, 'Gender, Authority and Mining', p.76.

<sup>135</sup> W. P. Hartley, 'Five Landed Estates', pp.193-4.

<sup>136</sup> This approach was also taken from the 1840s by the Bretton Hall estate, which entered into a 'strategic partnership' with the Low Moor Company. Hartley, 'Five Landed Estates', p.194.

<sup>137</sup> Griffin, *The British Coalmining Industry*, p.134; R. L. Galloway, *A History of Coal Mining* (facsimile reprint, New York, 1969), p.116; Ashton and Sykes, *The Coal Industry in the Eighteenth Century*, p.235; Flinn and Stoker, *The History of the British Coal Industry*, vol. 2, p.149.

<sup>138</sup> Goodchild, 'The Old Flockton Collieries', p.101.

<sup>139</sup> Milnes, *Warning Voice*, p.3

maintaining an 'in-house' fleet, turnpike tolls, and problems arising from interruptions of supply because of difficult road conditions would all have added cost to road transport. His remarks were probably not disinterested; the Milnes brothers' partnership had later been dissolved and this had left some bitterness. The brother who was the main mover behind the waggonway had:

without our knowledge or consent, bought some coal of Sir Thomas Blackett, and began to work it by our drains, agents, workmen, tools, etc etc in short sacrificed the interest of the joint colliery, to the interest of his private one, which had a tendency to deprive us of our birthright...this conduct gave his partners [including Richard Milnes] much offence...<sup>140</sup>

The coal being raised by the colliery was of excellent quality, although the seam measured only eighteen inches; this high quality may have encouraged the Milnes to invest so heavily.<sup>141</sup> Both the quality of Flockton's coal and its link to the waterways were sufficiently noteworthy to be mentioned in the evidence to the 1800 Parliamentary Commission on the Coal Trade. When John Hardy of Bradford described the Flockton coal as on a par with the Silkstone seam for excellence he noted also that there was 'already a communication with Hull from Flockton...'.<sup>142</sup>

Whatever folly the earliest line may have seemed retrospectively, by 1796 a railway link had become an integral part of the colliery operation.<sup>143</sup> The combination of a good product, an effective new transport technology and the efficiency of water for medium- to long-distance carriage enabled the colliery to overcome the disadvantages of a thin seam and a relatively isolated location, and to establish a flourishing regional market. Appendix 3 lists the locations of Milnes's 'Large Coals' and 'Ready Money' customers in May 1828. 'Large Coals' customer accounts were worth £4,095 3s.5d. (132 customers averaging just over £31 0s.0d.) and 'Ready Money' £1,292 0s.0d. (74 customers averaging £17 10s.0d.).<sup>144</sup> The importance of water transport is shown by the distribution of customers along the navigable Aire, Calder, Witham, Trent and Ouse basins, where the Milnes pits were

<sup>140</sup> Milnes, *Warning Voice*, pp.3-4.

<sup>141</sup> The colliery was probably also working the Flockton Thick seam, with 29in of good coal, albeit separated by a bed of shale. Bedford, 'Memorandum of the Seprate Seams', KC312/4/1.

<sup>142</sup> *House of Commons Report on the State of the Coal Trade, 1800*, pp.565-6. Hardy, a coalmaster as well as agent to the Spencer-Stanhope estate, had no financial interest in the Flockton mines; he presumably felt that the link with Hull would help to convince the Committee that it was possible to transport Yorkshire coal to London.

<sup>143</sup> Lease dated 16 Dec.1799. DD/S/I/210, Savile papers, WYAS (K). Goodchild, 'The Old Flockton Collieries', pp.102, 108.

<sup>144</sup> Account book showing customers and debts as at 19 May 1828. KC746/14, Flockton Collieries papers, WYAS (K). It is possible that the company also had local landsales customers who would collect coal in their own transport. The 'Large Coals' and 'Ready Money' descriptions therefore related to distant customers for whom transport was included in the sale price. The 'Ready Money' customers were presumably required to pay cash on delivery.



competing with other producers close to the Aire-Calder-Hebble waterways.<sup>145</sup>

The main concentrations of customers were in West Riding towns twenty to twenty five miles downstream, and in settlements along the Humber estuary and in the Trent and Witham basins. While there is no evidence in the company's extant records that it exported coal to Europe, Thomas Bedford's comments on the marketing problems experienced by coal from the Flockton area in the Low Countries suggest that some Milnes customers in East Coast ports may have been involved in the export trade.<sup>146</sup> Closer to home, there were eleven customers in York (around fifty miles distant by water) although the Milnes presence in the Ouse towns appears to have been limited, possibly because of traditional associations in those places with pits in the area east of Leeds. Significant clusters of customers could also be found in Lincoln (about ninety miles by water) and Gainsborough (seventy miles). Other than Doncaster and Stainforth (then to the east of the worked coalfield), there were no sales to towns on the Don, Dearne and Barnsley canals as they were themselves coal exporters. The single Halifax customer may have been generated by the very recent opening of the Halifax branch canal.

Lime was also produced by the company, probably enabling the in-house use of inferior coal as the Milnes collieries had access to the local Lime Coal seam: 'This seame is very little thought of only for the purpose of Burning Lime or Stone'.<sup>147</sup> The income from lime (£616 0s.1d.; 146 customers averaging £4 4s.0d.) was much lower than coal and the customers, farms and estates were almost entirely within a five to six mile radius of Flockton.<sup>148</sup> Distribution of the lime must have been by road, and the proximity of these customers suggests that this was a landsales trade; farmers were likely to own suitable carts and to collect the product themselves. The low value per sale makes it unlikely that the employment of a third party carrier would be economic; a company account in 1843 noted a 4s. delivery cost to a Huddersfield customer of coal which sold at 6d. per load.<sup>149</sup>

It is worth remarking that the Milnes operation's commercial 'reach' extended to much of Yorkshire and Lincolnshire (and possibly to foreign markets) at the same time that Anne Lister was carefully calculating whether she could compete in the market two miles away in Halifax. The Flockton area enjoyed better coal and geological conditions than pertained in Halifax, but the centres of population near Flockton were more distant than those accessible to the Lister estate. Given the cost premium

<sup>145</sup> Including Middleton, a very early user of railways by Yorkshire standards: 'The Middleton Colliery had two principal markets, Leeds township and a 'distant' market in the towns of Lincoln, Brigg, Gainsborough, Beverley, Driffild, Hull, York, Brotherton, Knottingley and other centres accessible by water from Leeds.' Rimmer, 'Middleton Colliery', p.47.

<sup>146</sup> See above, p.223 and fn.12.

<sup>147</sup> The quotation is from Bedford, 'Memorandum of the Seprate Seams', KC312/4/1. Goodchild, 'The Old Flockton Collieries', p.105.

<sup>148</sup> Law Pit account book, KC746, Flockton Collieries papers, WYAS (K).

<sup>149</sup> 'Huddersfield Coal Book', KC746, Flockton Collieries papers, WYAS (K). The opening of the Huddersfield Broad Canal reduced the cost of transporting a ton of lime for three miles from 4s. to 1s.. Hadfield, *The Canals of Yorkshire and North East England*, vol. 1, pp.61-2.



of land transport, the Milnes would have been at a disadvantage in selling at Wakefield or Huddersfield, seven to eight miles away and not directly accessible by water.<sup>150</sup> The company's strategy was therefore largely to eschew the local market, and instead to use efficient and reliable short-haul transport to reach the canal network, the cheapest medium- to long-haul carrier, and thereby gain access to markets outside the coalfield. In those markets, the excellence of the coal and the reliability of supply enabled by the waggonway were key competitive advantages. The investment in transport to reach markets outside the coalfield was successful; the assets of the company in 1850 included three collieries, an iron foundry, coke ovens and lime kilns (all with interconnecting railways), plus a staithe and boats, a quarry and ancillary buildings including tradesmen's workshops, a warehouse and administrative offices.<sup>151</sup>

The estates from which the Milnes leased coal benefited from the success of the mining operation through the income generated by coal extraction and railway wayleaves. At Shelf the Savile estate addressed a similar problem of location relative to markets by establishing direct relationships with major industrial end-users who possessed the resources to overcome the transport problem. For Anne Lister at Shibden Hall the combination of local geological conditions and transport barriers created an opportunity to maximise profit through a low-technology mining operation undertaken directly by the estate. Three distinct strategies for generating revenue from their mineral resources can therefore be identified: overcoming a disadvantage of location by exploiting the key advantage of the early (for the region) use of new and efficient transport technology, combined with the confidence and commercial strength to enter new and distant markets; the sale of mining rights to organisations which undertook the extraction and consumed the minerals in-house; and for the estate itself to mine and sell the mineral. The first two strategies were lower-risk to the landowner as the tenants were contracted to pay the minimum annual rental in any event, although it made the Savile estate at Shelf dependent on the success of two large customers. The third strategy offered the prospect of a high return to the estate, but required capital investment by Anne Lister and her direct involvement in a potentially volatile market.

## CONCLUSION

The coal measures around Huddersfield and Halifax were exploited early because of their easy accessibility on the outcrop, but the variability of coal quality and thin, faulted seams restricted the reserves of economically workable coal. The Pennine area could not rival the south Yorkshire coalfield in terms of productivity or the size of individual mining enterprises, and by 1914 the western part of Yorkshire was the only district in England where the majority of pits were working seams under four feet thick. It was therefore vulnerable to competition from lower-cost producers and was the first Yorkshire coalfield in which large-scale mining came to an end.<sup>152</sup>

<sup>150</sup> Milnes had seventeen customers in Wakefield, but more in Hull (65 miles from Flockton) and Knottingley (25 miles).

<sup>151</sup> 1850 valuation of the assets of Flockton Collieries. KC746, Flockton Collieries papers, WYAS (K).

<sup>152</sup> Mitchell, *Economic Development of the British Coal Industry, 1800-1914*, p.87.



Despite these geological problems, mineral extraction, and coal in particular, presented a wonderful financial opportunity for estates in the West Riding during the period 1750-1830. Mining developed from an estate sideline supplying the immediate locality into an industry in which success could be highly rewarding financially but which required the commitment of significant amounts of capital and the application of specialised technical and marketing expertise. Most landowners - certainly those considered in this study - were both well aware of the value of their mineral resources and keen to realise that value; in the words of the Savile estate land agent, mineral income was 'of too much consequence' to be neglected.<sup>153</sup>

As with agriculture, mining moved from being a direct estate activity to one in which, for most landowners, the right to exploit the crucial resource was sold to another party. While keen to gain financial advantage from a developing industry which could give profits significantly above those of agriculture, landowners preferred to retain the well-established commercial structure of the lease. The lease had the value of guaranteeing, so far as was possible, a predictable income to the estate; the tenant took the greater part of the risk but could also reap a higher reward if the enterprise prospered. Landowners often indirectly promoted their own interests by investing in canals and turnpike improvements to enable the minerals to be marketed more efficiently and widely. The resulting increase in tonnage produced dividends for canal shareholders, which clawed back to the landowner some of the income that the mining tenant generated.

As landowners gained experience in the problems and opportunities associated with mining, the lease became a complex legal instrument which was designed to maximize their income and protect their other interests such as the agricultural, urban or aesthetic value of the surface land.<sup>154</sup> Initially, landowners often constrained production in order to prolong leasehold income from the mining of coal readily accessible in shallow seams. As mining technology improved after about 1800, more of the West Riding's multiple coal seams could be exploited. This lessened the fear that a limited resource would be rapidly and inefficiently stripped out, and most landlords believed that their interests could best be served by encouraging properly managed extraction.

The economic significance of mining to landowners is indicated by the widespread employment of specialist advisors to manage the estates' mining interests. The relationship between mining landlord and tenant became increasingly business-like and defined by commercial and legal structures. The influence of expert advice and the landowners' openness to alternative means of exploiting their mineral assets can be seen in the range of responses by estates to their particular circumstances. Whatever it took, landowners wanted access to the riches hidden below their property.

<sup>153</sup> Letter from John Sykes to John Hardy of the Low Moor Ironworks, 15 April 1799. DD/S/I/166, Savile papers, WYAS (K).

<sup>154</sup> And also better able to avoid expensive mistakes, for which a landowner could suffer for the term of the lease.

The ways in which estates realised the value of their coal reserves reflected their particular circumstances. The Spencer-Stanhope estate, with reserves of good quality coal and easy access to the Aire-Calder basin, could afford to risk the failure of a £600 per year tenant; Anne Lister employed her own colliers on the basis that she would be able to sell two hundredweight corves for a penny less than the competition; the Savile estate at Shelf leased directly to corporate end-users. By 1830, coal mining in the West Riding, fuelled by the considerable amounts of money that were being generated, was metamorphosing from a casual estate activity into a sophisticated industry. It had its own transport infrastructure, a specialised body of commercial and legal expertise, and sold differentiated products to a range of customers. In some cases these customers were widely spread across the region. Mining was pulling in investment capital from other economic spheres, attracted by the profits available from supplying a key primary material to an economy which was based on mineral products and powered by steam.<sup>155</sup> Enthusiastically pursuing their self-interest, the estate-owners of the West Riding participated fully in this lucrative enterprise.

<sup>155</sup> E. A. Wrigley, *Continuity, Chance and Change: The Character of the Industrial Revolution in England* (Cambridge, 1988), pp.86-7.



APPENDICES

Appendix 1: Occupations of mining lessees

OCCUPATION	INSTANCES	COMMENTS
Banker	2	These individuals appear in a earlier lease as 'Merchant'
Butcher	3	One individual appears twice
Chapman	1	
Cloth draper	1	This individual appears in a later lease as 'Coal merchant'
Coal merchant	2	One individual appears in an earlier lease as 'Cloth draper'
Coal miner	17	Two individuals each appear twice
Cornddealer	1	
Farmer	2	These individuals appear in an earlier lease as 'Stuffmaker'
Gentleman,'Esquire'	13	Four instances are the same individual
Innkeeper	1	
Ironfounders	6	Two pairs of partners; one pair appears in two leases
Merchant	3	Two individuals appear in a later lease as 'Banker'
Stuffmaker	2	These individuals appear in a later lease as 'Farmer'
Tanner	1	
Widow	2	Both appear to be widows of previous lessees
Woodman	1	
Yeoman	8	

Sources:

1. West Yorkshire Archive Service (Kirklees):  
Savile Papers: DD/S/I/168, DD/S/I/210, DD/S/1/74, DD/S/I/123, DD/S/I/169, DD/S/I/210.  
Clarke-Thornhill papers: DD/T/L/V/68, DD/T/L/X/Va/1, DD/T/L/X/Va/2, DD/T/L/XLIH/4, DD/T/L/XXVb/2, DD/T/L/XLIH/5.  
Whitley Beaumont papers: WBD/IX/97, WBD/IV/246, WBD/IV/320, WBD/IV/345, WBD/III/222.  
Helliwell and Sutton papers: DD/HS/F/9.  
Kidd Meller papers: KC6/9/1.

2. West Yorkshire Archive Service (Calderdale)  
Shibden Hall papers: SH:2/CM/1775/3, SH:2/CM/1790, SH:2/CM/1802, SH:2/CM/1813, SH:2/CM/1824.

Appendix 2: Table 1: Estimated coal production in Yorkshire, 1750–1830<sup>1</sup>

YEAR	PRODUCTION (000,000 TONS)	% OF TOTAL IN WEST YORKSHIRE
1750	0.5	70
1775	0.85	70
1800	1.1	65
1815	1.95	70
1830	2.8	72

<sup>1</sup> Production estimates taken from Flinn and Stoker, *The History of the British Coal Industry, vol. 2, 1700-1830: The Industrial Revolution*, p.26. These figures were used rather than, for example, those produced by Pollard (S. Pollard, 'A new estimate of British Coal Production 1750-1850', *EcHR* 33:2 'May 1980', 229-30), as they appear to be based on more comprehensive sources and because they align more closely with the production figures proposed by Mitchell which are used in Table 2. The percentage of the total mined in west Yorkshire is taken from Pollard, 'A new estimate of British Coal Production 1750-1850', p.227.



Table 2: Estimated consumption of the output of the Yorkshire coalfield, 1816–1855<sup>1</sup>

USAGE	MILLIONS OF TONS (PERCENTAGE OF TOTAL IN BRACKETS)			
	1816	1830	1840	1855
Exports	–	–	–	0.1 (1.25%)
Coastwise	–	–	0.2 (5%)	0.1 (1.25%)
Ironworks	0.2 (11%)	0.3 (12%)	0.5 (12%)	0.9 (11%)
Local general manufacturing	0.6 (33%)	0.9 (36%)	1.4 (36%)	3.7 (48%)
Local domestic	0.9 (50%)	1.1 (44%)	1.5 (38%)	1.9 (25%)
Manufacturing and domestic railed	–	–	–	0.2 (3%)
Railways	–	–	–	0.2 (3%)
Steamships	–	–	–	–
Collieries	0.1 (6%)	0.2 (8%)	0.3 (9%)	0.5 (7%)
Total	1.8	2.5	3.9	7.6

<sup>1</sup> Figures taken from B. R. Mitchell, *Economic Development of the British Coal Industry, 1800-1914* (Cambridge, 1984), p.16.

Appendix 3: Numbers of Flockton Collieries customers at locations specified in the account book showing customers and debts as at 19/5/1828 (KC746/14, Flockton Collieries papers, WYAS [K])

LOCATION	NEAREST WATERWAY	LARGE COAL CUSTOMERS	READY MONEY CUSTOMERS	TOTAL	COMMENTS
Acomb	Ouse		1	1	
Barrow	Humber	3	1	4	
Barton	Humber	3		3	
Batterswick	Trent		1	1	
Beverley	Beverley Beck Canal	3		3	
Bevingham		1		1	Location not identified
Boroughbridge	Ripon Canal		1	1	
Boston	Witham		1	1	
Brigg	Ancholme	5	1	6	
Brighouse	Calder & Hebble Canal		1	1	
Brotherton	Aire	7	1	8	
Castleford	Aire	6	3	9	
Crigglestone	n/a		1	1	
Davington		1		1	Location not identified
Dewsbury	Calder		1	1	
Doncaster	Don Navigation		1	1	
Driffield	Driffield Canal	1		1	
Fairburn	Aire	1		1	
Ferriby	Humber	1	1	2	
Frodingham	Trent		1	1	
Fulford	Ouse		1	1	
Gainsborough	Trent	6	6	12	
Grantham	Witham	1		1	
Grimsby	Humber	2		2	



Appendix 3 (continued)

LOCATION	NEAREST WATERWAY	LARGE COAL CUSTOMERS	READY MONEY CUSTOMERS	TOTAL	COMMENTS
Halifax	Halifax Canal		1	1	
Hallingbro		1		1	Location not identified, but probably Lincs
Hedon	Humber	3		3	
Hessle	Humber			1	
Horbury	Calder & Hebble Canal	1		1	
Horbury Bridge	Calder & Hebble Canal		1	1	
Horncastle	Horncastle Canal		2	2	
Hull	Humber	13	9	22	
Killingholme	Humber	1		1	
Kirk Ella	Humber	1		1	
Knottingley	Aire & Calder Navigation	14	8	22	
Leven	Driffield Canal	1		1	
Lincoln	Witham	9	6	15	
Louth	Louth Navigation	1	2	3	
Mirfield	Calder	1	1	2	
Morton	Witham		2	2	
Nafferton	Driffield Canal	1		1	
Newton-on-Ouse	Ouse	1		1	
North Kyme	Witham	1		1	
Oulton	Aire & Calder Navigation		1	1	

Appendix 3 (continued)

LOCATION	NEAREST WATERWAY	LARGE COAL CUSTOMERS	READY MONEY CUSTOMERS	TOTAL	COMMENTS
Patrington	Humber	5		5	
Ripon	Ripon Canal	1		1	
Saltmarshe	Ouse	1		1	
Sandal	Calder	1		1	
Selby	Ouse/Selby Canal		1	1	
Shepley Bridge	Calder & Hebble Canal		1	1	
South Kyme	Witham		1	1	
Stainforth	Don Navigation		3	3	
Tattershall	Witham	2		2	
Tetney Lock	Louth Navigation	1		1	
Thornhill Lees	Calder & Hebble Canal	1		1	
Wakefield	Calder & Hebble Canal	11	6	17	
Wintringham	n/a		1	1	
Woodlesford	Aire & Calder Navigation		1	1	
York	Ouse	9	2	11	



## Appendix 4: Early Mining Techniques

The simplest form of mining was to dig into the outcrop of the coal and follow it as far as possible into the hillside. Where coal was found on flatter land, a short (less than 100 feet in depth) vertical shaft might be made. This was opened out when the mineral was reached - the 'bell pit'. An outcrop adit or bell pit would be abandoned at the point at which the roof became unstable, ventilation problems arose or the digging became inconvenient to work because of the distance from the working face to the surface. A new working would then be dug elsewhere on the outcrop or, in the case of a bell pit, near enough to the previous shaft to maximise coal extraction. Numerous bell pits would be dug in a small area, using the spoil to fill in the previous working; for example, bell pits in the Flockton area were typically about fifty yards apart, and used windlasses for access to the working level.<sup>1</sup>

Sinking deeper pits brought a new set of problems. The coal in West Yorkshire is often faulted, causing the coal to be shifted to a different depth and forcing the miner to expend resources in searching for the seam. Water occurred in quantity even in relatively shallow pits. It could be removed by being lifted up the shaft in buckets or rags, although before the introduction of steam-powered pumps this was an inefficient and costly exercise. More commonly it was addressed by driving a water level ('sough') to drain water away from the bottom of the area of coal. William Woodhead, a coalmaster operating near Shelf around 1800, was reputed to have 'laid out at least £2000 in making [a] drain' to dry his coal reserves.<sup>2</sup> Excess water could make a seam unworkable, even if it was close to the surface. Thomas Bedford dismissed the potential of a bed near Kirkburton:

This seam of coal lies at the debth of about 10 yards...16 inches thick good coal, butt my oppinion will be with great dificultey to work this coal. There have been atempt maid...but whear oblige to give up. The reason is my oppinion as there are a strong rock very jointey over this seam so as the water pours out in abundance upon the miner. This been owing to the coal cropping out in a valley on the north side whear a larg suply of water runs....<sup>3</sup>

Drainage had to be undertaken carefully, to avoid also draining neighbouring mines; at a time when markets were highly localised and the expense of production the main element of the total cost, to reduce a competitor's expenses could be commercially disastrous.

<sup>1</sup> D. H. Holmes, *Mining and Quarrying Industries in the Huddersfield District* (Huddersfield, 1967), p.25; M. C. Gill, 'Keighley Coal' *British Mining* no.74 (2004), pp.9-11.

<sup>2</sup> Evidence of Jonathan Holmes, miner, of Shelf, in a legal action relating to coal rights in the area. DD/S/1/168; Savile papers, WYAS (K).

<sup>3</sup> Bedford, 'Memorandum of the Seprate Seams', KC312/4/1.





# WILLIAM BATTIE WRIGHTSON MP AND NORTHALLERTON: A WHIG AND A SMALL PARLIAMENTARY BOROUGH, 1832-1874\*

By Brian Barber

*William Battie Wrightson (1789-1879) was the third and final member of his family of Yorkshire gentry to serve as a Member of Parliament. A Whig like his father William Wrightson, he enjoyed a political career that spanned over sixty years. He was first approached to stand at Lincoln in 1811 and then elected but immediately unseated at Retford in 1828. He sat for Hull between 1830 and 1832 and, after an initial reversal, represented Northallerton, a small borough where he had family connections, from 1835 until 1865. He was the unsuccessful candidate there in 1866, did not stand in 1868 but stood once more in 1874, although he again failed to take the seat. His career as a representative member of the Whig gentry on the backbenches in the middle of the nineteenth century touches on some of the preoccupations and characteristics of his class in mid-Victorian parliaments.*

## ORIGINS AND BACKGROUND

William Battie Wrightson (1789-1879) was the eldest of the eight children of William Wrightson and his second wife, Harriot (née Heber). The Wrightson family had entered the landed gentry in the later-seventeenth century through the acquisition of an estate at Cusworth, and in the ninety years before the birth of W. B. Wrightson had improved their situation through financially astute marriages. His great-grandfather, William Wrightson, had acquired estates in Northumberland and County Durham through two successive marriages to Tyneside heiresses. This William Wrightson's own daughter and heiress married the heir of the Batty family of Warmsworth, in the neighbourhood of Cusworth, and her husband adopted her surname, so providing an instance of the superficially remarkable continuity of succession in some gentry families over many generations. The son of this union, William Wrightson Batty, who took the name of William Wrightson on inheriting the estates, married twice like his grandfather and by his first marriage gained an estate at Hurworth in County Durham. When John Bateman published his celebrated survey of the landed classes, William Wrightson's son, W. B. Wrightson, appeared as a major landowner amongst the ranks of the gentry who, by the author's definition, were men receiving at least £3,000 gross income from the ownership of at least three

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thousand acres.<sup>1</sup> With estates in the West Riding of Yorkshire, Northumberland and Durham, W. B. Wrightson possessed 6,260 acres and a gross income from landed property of £10,610. Shortly before Bateman compiled his book, Wrightson made extensive purchases in the neighbourhood of Northallerton, in the hopes of consolidating his political position there.

W. B. Wrightson and his four brothers received an education suitable to their position, attending Winchester, Oxford or Cambridge and at least three being admitted to Lincoln's Inn, like their father, to read for the bar.<sup>2</sup> Of his three sisters, only the eldest married. She gave birth to five daughters, the sole progeny of this entire generation of Wrightsons. At Winchester, William won gold medal essay prizes in 1807 and 1808, and then at Trinity College, Cambridge, he was awarded the declamation prize in 1810 and the senior bachelor essay prize in 1813.<sup>3</sup> The previous year he had attended Edinburgh University, a customary substitute for the Continental tour in a period when Europe was closed to the British. There he heard, and conscientiously took notes on, lectures from Professor T. C. Hope on chemistry, Thomas Brown, professor of moral philosophy and John Playfair, the professor of natural philosophy.<sup>4</sup> He was then admitted to Lincoln's Inn and called to the bar. At least three generations of his family had served as justices of the peace on the county (West Riding) commission, and W. B. Wrightson himself became a member of it in 1822 and later became chairman of the quarter sessions. From 1852 until 1874 he was chairman of the Doncaster board of poor law guardians and chaired the local Strafforth and Tickhill highway board.<sup>5</sup> His great grandfather had served as a Member of Parliament for Newcastle upon Tyne from 1710 to 1722 and for Northumberland from 1723 to 1724 and his father as the member for Aylesbury between 1784 and 1789 and over the subsequent four decades had played a significant role in the Whig politics of the West Riding. With such a family background, it was natural that he himself would aim at influence beyond his locality and seek membership of the House of Commons. Indeed, one surviving letter to his father from Cambridge in 1810 is a lengthy and lively account of the proceedings in the parliamentary election for the borough.

Such an inclination would have been reinforced by his principal friendships. Whilst at Winchester and Cambridge he acquired four friends who were to be important to him in later life and in whose letters politics figure very prominently. The friends

<sup>1</sup> John Bateman, *The Great Landowners of Great Britain and Ireland*, 4th edn (1876) (Leicester, 1971), p. 490. By this date, the estate was in the possession of R. H. Wrightson, the surviving brother of W. B. Wrightson. See also Brian Barber, 'The Landed Gentry of the Doncaster District', in *Aspects of Doncaster*, ed. B. Elliott (Barnsley, 1997), pp. 49-74.

<sup>2</sup> Identified in William Wrightson's obituaries in the *Gentleman's Magazine* (1828), p. 273 and the *Annual Register* (1828), pp. 213-14.

<sup>3</sup> J. A. Venn, *Alumni Cantabrigienses* part 2, vol. 6 (Cambridge, 1954), p. 600; the texts of the prize essays and declamation are to be found at Doncaster Archives [hereafter DA], DDBW/F1/21, 23-25 and 27.

<sup>4</sup> DA, DDBW/F1/28-30, notebooks on these lectures.

<sup>5</sup> *Doncaster Gazette*, 14 Feb 1879 and DA, DDBW/P/149.



were William Empson (1791-1852), Charles Shaw-Lefevre (1794-1888), Robert M. Rolfe (1790-1868) and Thomas Spring Rice (1790-1866).<sup>6</sup> The first three had, like Wrightson himself, attended Winchester, Trinity and Lincoln's Inn, the latter Trinity only. Lefevre and Rice were also sons of gentry families (the latter's in Ireland), whilst Rolfe was the son of a well-connected clergyman. Empson's antecedents are less well ascertained. After a period as a practising barrister, he was appointed as professor of law at Haileybury College where he became a colleague of Rev. T. R. Malthus, the classical economist and writer on population. In 1823 he began to contribute to the *Edinburgh Review*, the influential Liberal quarterly magazine, assuming the editorship of the *Review* in 1847, a position he held in tandem with his post at Haileybury until his death.

Lefevre, Rolfe and Rice all became Members of Parliament, achieved senior positions and acquired peerages, although none reached the very first rank in politics. Rice was the first into parliament, winning a seat for Limerick in 1820, but moving to Cambridge in 1832 which he represented until 1839 when he became the first Baron Monteagle after a disappointing political career. He had been colonial secretary in 1834 and an indifferent chancellor of the exchequer from the following year but failed, despite three attempts, to become Speaker. At his last attempt, he was in competition with Lefevre, who was first elected in 1830 for Downton, the pocket borough that Wrightson's father had contested in 1796, before sitting for Hampshire from 1831 to 1857. From 1839, when the House preferred him to Rice, he served as Speaker and, most unusually, did so for almost two decades, receiving a viscountcy on his retirement in 1857. Last into the Commons, sitting for Penryn and Falmouth from 1832 to 1839, was Rolfe. A solidly prospering career at the bar led to his appointment as a judge in 1839, a judge of appeal and a peer (as Baron Cranworth) in 1850 and, after some hesitation over his suitability, Lord Chancellor on two occasions, from 1852 to 1858 and again from 1865 to 1866.

At first it seemed that Wrightson would achieve a precocious entry into the House as MP for Lincoln. In 1811, earl Fitzwilliam approached his father to ask if his son would be able to take the seat. This followed a correspondence between Fitzwilliam and Lady Monson, the patroness of one of the seats, as she wrote that 'of him I have heard a most flattering account, of his talents &c'. He seemed to be, she declared, the ideal candidate, but added the vital caveat, 'should his Father not object to the expense'.<sup>7</sup> Father and son conducted a protracted consideration. Wrightson wrote

<sup>6</sup> All appear in the *Oxford Dictionary of National Biography* [hereafter *ODNB*] ed. H. C. G. Matthew and B. Harrison (2004): Empson in vol. 18, pp. 427-8; Rice in vol. 46, pp. 655-7; Rolfe in vol. 47, pp. 610-12; and Shaw-Lefevre in vol. 33, pp. 162-3. Spring Rice also makes frequent appearances in P. Mandler, *Aristocratic Government in the Age of Reform, Whigs and Liberals 1830-1853* (Oxford, 1990). In addition to the letters from these correspondents amongst Wrightson's papers at Doncaster Archives, there are letters from both Wrightson, 1811-15, and Empson to Rolfe in the Hammick Papers, vol. VII, British Library [hereafter BL], Add. Mss. 79502.

<sup>7</sup> The quotations in this paragraph are taken from letters in Sheffield Archives [hereafter SA], WWM/F/108/3, 5 and 17. See also R. G. Thorne, *The House of Commons 1790-1820*, vol. 2 (London, 1986) pp. 254-5.



excitedly to his friend Rolfe that 'the event of the king's death may now be expected any day, and in six months after that I shall either begin to rank as a Legislator or be ready to hang myself for having spent my money for nothing'. However, his father's reluctant decision was that, tempting though the offer was in providing the opportunity for his son 'to attach himself, as I have done, to the Politics of your family as a Aristocratic Whig', the offer had to be rejected. There were two problems, one immediate, the other long-term. The dissolution of parliament and a consequent general election seemed imminent, which would mean the expense of yet another contest. Moreover, the political climate seemed unfavourable. The political false dawn of the Regency and the dashing of the expectations of the Whigs meant for William Wrightson that his hopes that his son 'might join in support of the measures of what may be called the new reign under the Administration of my political friends ... seem at an End'.<sup>8</sup> The son's political hopes were still alive in 1815, when he wrote to Rolfe that 'with respect to my prospects you know about as much as I do myself -viz - that when the dissolution takes place if my attempt succeeds I shall find myself in a new world at once'. Yet it was to be a further ten years before another opportunity was to be offered to the aspirant politician. If W. B. Wrightson did not achieve so easy an entry to parliament as Rice at the age of twenty-six, he did contest a seat before his two other friends and went on to have as long a political career as the three of them, although one served entirely as a backbencher. However, there was first a European tour, delayed by the Napoleonic Wars, and a marriage that was to affect not only his personal life but his political life as well.<sup>9</sup>

#### EARLY ELECTORAL FORTUNES

On 27 March 1821, Earl Fitzwilliam wrote to Henry Peirse of Bedale on the marriage of his granddaughter to W. B. Wrightson, congratulating him 'not that She is married, but that She is married to as excellent a young man as Wrightson, one of a turn & temper of Friend that opens a fair prospect of the connection She has formed, proving the Source of a happy Life'.<sup>10</sup> The marriage created a parliamentary opportunity that was later to benefit Wrightson greatly but before that arose the good opinion of the earl had more immediate consequences. In September 1825, whilst Wrightson was holidaying in the Welsh mountains, a letter from Earl Fitzwilliam arrived at Cusworth and so was opened by his father.<sup>11</sup> Its contents seemingly asked

<sup>8</sup> BL, Add. Mss. 79502, Hammick Papers vol. II, ff. 104-5 and 132-3, W. B. Wrightson to R. M. Rolfe, 26 July 1811 and 14 Aug 1815; SA, WWM/F108/17, William Wrightson to Earl Fitzwilliam 26 Feb 1812.

<sup>9</sup> DA, DDBW/F7/32, Letters from W. B. Wrightson to his mother from Ostend, Frankfurt, Milan, Rome and Venice between 7 Sept 1816 and Easter Sunday 1817.

<sup>10</sup> DA, DDBW/F7/38, copy of a letter of Earl Fitzwilliam to H. Peirse, 27 March [1821].

<sup>11</sup> The correspondence relating to the Retford election is to be found in the Wentworth Woodhouse archives at SA, WWM/F/33e. For the Duke of Newcastle's role in the constituency, see R. A. Preston, 'East Retford: the last days of a rotten borough', *Transactions of the Thoroton Society* 78 (1974), 94-103 and *Unhappy Reactionary: the diaries of the Fifth Duke of Newcastle*, ed. R.A. Gaunt, Thoroton Society Record Series, vol. 43 (2003), pp. 48-50 and 53-65.



the son to consult with two influential locals, Mr. H. Foljambe and Col. J. Kirk, on the possibility of his standing for the borough of East Retford in a forthcoming by-election. Wrightson senior replied to the earl that he was 'in my chaise' immediately to visit them and promised to write to his son that evening after the meeting. On 15 September, Wrightson told the earl that there seemed no other candidate in the field and that, after taking advice from Foljambe and Kirk, he had called a meeting for 'feeling the pulse of the voters'. A letter from Kirk to Fitzwilliam the following day told him that the results of a local canvass suggested that the chances of a successful challenge to Foljambe and Wrightson by a Mr Maddocks 'cannot have the smallest chance tho' the Red or Newcastle party should wish to have a third man'. By 18 September, the earl's letter had reached W. B. Wrightson, who replied from Barmouth, thanking Fitzwilliam for the opportunity offered, 'having been long desirous of a seat in parliament'.

The dukes of Newcastle, resident at nearly Clumber Park, had exercised a varying degree of political influence in Retford, which fluctuated with their willingness to make substantial payments to the freemen voters. Expensive contests in 1802, 1806 and 1807 gave the duke control of both seats, but financial fatigue caused his withdrawal between 1812 and 1826. During this time, Earl Fitzwilliam became influential in the borough, sponsoring one of the candidates in 1812 and 1818. Unfortunately for Wrightson, the earl's decision to support him and another candidate, Sir Robert Dundas, led to a revival of the Newcastle interest and a three-cornered contest featuring some violence and proven venality. At the request of the corporation, there was a military presence at the poll on 9 and 10 June 1826 and some degree of disorder. Anticipating defeat, Sir Henry Wilson announced that he intended to petition the House of Commons against the conduct and outcome of the election, which showed Wrightson to have topped the poll, with 120 votes, followed by Dundas with 118 and Wilson a poor third with only 53. Wilson's petition led to the creation of a select committee after the Commons convened in February 1827 and its report to the House in May advised that the election was void and the members in consequence were not elected. It also raised the issue of the 'corrupt state' of the borough. In consequence, the Commons, whilst retaining a Retford constituency, widened its boundaries to include the whole of the Hundred of East Bassetlaw, effectively disfranchising the borough and turning it into a county constituency. The committee, however, saved the reputation of Wrightson and his colleague by exonerating them from any involvement in bribery. It appears, in any case, that they did not personally incur any expense, for Fitzwilliam footed a bill that amounted to at least £1,330.<sup>12</sup> Making the best of the result, Wrightson wrote to his father on 14 April 1827, telling him that

they have just decided, and they have unseated us both, upon the ground of treating - They have reported very strongly against the borough - and they have voted the petition frivolous and vexatious against the returning officer; which has the effect of taking off a considerable part of our expense - It has been a bad

<sup>12</sup> SA, WWM/F/127/206, J. Lee to Earl Fitzwilliam.

business altogether, but it really is no small consolation to me that the borough is to be disfranchised - because a very great public advantage must result from that - It is a great annoyance no doubt to be thrown out just at this interesting time.<sup>13</sup>

His ambitions were finally realised in August 1830, when he received a letter from Daniel Sykes. He was the borough recorder of Hull, a Whig and ally of Fitzwilliam, who had represented the constituency for four years, and was standing down to contest Beverley.<sup>14</sup> He suggested that Wrightson offer himself as one of its two members. Success, however, came at a price, as Hull was a constituency where the poorer freemen electors expected to be paid to vote. Wrightson was able to indulge his ambition because he had inherited the family estates on the death of his father two years earlier. Nevertheless, he paid handsomely for his indulgence since, because of the political turmoil of the Reform Bill, there were general elections in 1830 and again in 1831. His election expenses in these two years totalled £2,931, or nearly two-fifths of his income. In both elections, the accounts of Wrightson's agent included £1,308 16s. 'paid to 1,045 persons in sundry small sums' of one and two guineas.<sup>15</sup> In his final electoral address, he wrote of the Reform Bill and of the selflessness of those 'who, in the great struggle to obtain it, have twice deliberately voted away their own seats, obtained at no trifling cost',<sup>16</sup> perhaps silently reflecting on the large and recurring cost of retaining his own. He had plans to adopt a less demanding and a less costly constituency than Hull had proved to be, although events were not initially to develop as he would have hoped.

#### THE YORKSHIRE BOROUGHES AFTER 1832

After the reform of 1832 there were eighteen parliamentary boroughs in Yorkshire and six county members, the latter equally distributed between the three Ridings. Thirteen boroughs each returned two members whilst five possessed only one each, so making thirty-seven MPs for the entire county. Yorkshire thus accounted for over a twelfth of the 467 MPs returned for English constituencies. Eleven of the parliamentary boroughs were long-established and had been two-member constituencies up to 1832. Apart from the large mercantile towns of Hull and York, these were medium-sized and small market towns, Beverley, Knaresborough, Malton, Pontefract, Richmond, Ripon and Scarborough amongst them. Two further

<sup>13</sup> DA, DDBW/F7/26.

<sup>14</sup> DA, DDBW/F7/56, D. Sykes to W. B. Wrightson; and *Victoria History of Yorkshire* [hereafter *VCH*], *East Riding*, ed. K. J. Allison, vol. 1 (Oxford, 1969), pp. 202 and 206.

<sup>15</sup> DA, DDBW/P 110 and 111, Account of Messrs Lightfoot and Earnshaw's disbursements, 1831. Wrightson's average income in 1830-3, according to his own calculations, was £7,433 and his election expenses (not further specified) were £1,900 in 1830 and £1,031 in 1832 (DA, DDBW/P/110).

<sup>16</sup> DA, DDBW/P/109, Retiring Address, 3 Dec 1832. Wrightson's in-coming letters as MP for Hull are to be found at Hull City Record Office, reference DMX8. There are photocopies at DA, reference DZMZ/130.



boroughs, the smallest, Northallerton and Thirsk, both lost one of their members in the reform. All had their franchises enlarged to include householders with property valued for rating at not less than £10, besides those electors with traditional voting qualifications, and most had their boundaries widened.

In addition to the ancient boroughs, seven new constituencies were created. Five of these were the major industrial towns of Bradford, Halifax, Huddersfield, Leeds and Sheffield, with two smaller ones, Wakefield and Whitby. All were given two MPs, apart from Huddersfield and Whitby, which received only one each. In contemporary circumstances, this was a less inequitable arrangement than would at first appear. Since the franchise depended on a property qualification, the relevant criterion was not the mere size of a town's (adult male) population but the number of residents who would qualify as electors. Bradford, for instance, with over 40,000 residents and Beverley, with little more than 8,000, actually possessed electorates roughly equal in size, numbering 1,139 and 1,011 respectively. Comparing Halifax (population 33,582) and Malton (7,661), the number of electors in the less populous borough was actually the greater: 667 compared to 531. Nationally, this pattern was repeated and ratios of electors to residents of 1:14 for pre-1832 boroughs, compared to 1:34 for newly created ones, reflected a more evenly distributed prosperity in those towns less affected by industrialisation. The comparable ratios for the boroughs of the West Riding were 1:16 and 1:28. The new industrial towns had even made a poor showing when, before becoming parliamentary boroughs, any residents possessing the more modest minimum of the 40-shilling freehold were entitled to vote in county elections. In the Yorkshire election of 1807, Leeds and Sheffield accounted for less than 3 per cent each of the total county electorate.<sup>17</sup>

Five of the smaller Yorkshire boroughs have been described as being, in varying degrees, 'proprietary' boroughs, after the reform of 1832. Two were controlled by Whig peers: Malton, the fief of earl Fitzwilliam, and Richmond, the domain of the Earl of Zetland. The three others were Thirsk, Ripon and Northallerton. The latter two were unusual in having female patrons. At Ripon, the tenants of Miss Lawrence of Studley Royal voted at her bidding for whosoever was nominated by Peel and the national managers of the Conservative party after 1837. At Northallerton, however, whilst Miss Marianne Peirse of Bedale Hall had inherited the interest of her family in this small North Riding borough constituency, the immediate consequence of this in 1832 was to prove detrimental to her nephew, W. B. Wrightson.<sup>18</sup>

<sup>17</sup> The post-1832 ratios are calculated from C. Dod, *Electoral Facts 1832-1853 Impartially Stated*, ed. H. J. Hanham (Brighton, 1972). The pre-1832 statistics for Leeds and Sheffield are taken from J. C. D. Clark, *English Society 1660-1832* (Cambridge, 2000), p. 475.

<sup>18</sup> N. Gash, *Politics in the Age of Peel*, (London, 1953) ch. 9. Gash, who did not have the History of Parliament volumes at his disposal at the time he wrote, wrongly believed that the Peirse family were Tories when, in fact, they were Whigs. For Malton, see E. A. Smith, 'Earl Fitzwilliam and Malton: A Proprietary Borough in the Early Nineteenth Century', *English Historical Review*, 80 (1965), 51-69.

## THE TOWN AND CONSTITUENCY OF NORTHALLERTON

Northallerton, a small market town thirty miles north of York, remained a traditional community in a predominantly agricultural region.<sup>19</sup> In 1861, the North Riding had almost a third of its adult population employed in agriculture, a proportion exceeded only by Rutland. The land in the parish was almost equally divided between pasture and arable in 1842. Three hundred years earlier, Leland had described the town as being 'yn one fair long streate lying by north and south', with the Darlington and Durham road (turnpiked by an Act of 1754) in one direction, and in the other the road to Thirsk and York (turnpiked after 1753), forming a route running broadly parallel to the Great North Road to the west. Cattle droving and dealing had been, and continued to be, a major feature of the local economy. In the early eighteenth century, Defoe reported that the town had 'the greatest beast market in England' to which 'incredible numbers' were driven 'eight times a year and brought southward'. By the end of the nineteenth century, the four annual cattle and three sheep markets were being replaced by auctions. Population numbers for the parish showed steady growth between 1801 and 1841, when the Great North of England Railway came to the town, and then virtual stability for the next three decades. There were 3,633 residents in 1801, 5,242 by 1851 and 6,050 in 1901. Northallerton township contributed by far the largest number, followed by Brompton, with Romanby, Deighton, and High Worsall townships trailing behind. The parish attracted few long-distance migrants: in 1851, almost half the population had been born there with just over a further third originating elsewhere in Yorkshire.

The town gradually became a local railway hub. The building of the Great North of England Railway was authorised in 1837 as part of what eventually became the east-coast route from London to Scotland. The Leeds and Hartlepool, (later known as the Leeds Northern) was begun after an Act of 1846, followed by the Great North of England and Bedale Branch line in the same year and the Leeds and Thirsk railway was authorised by an Act in 1848. The railways may not have transformed the local economy, but they had a perceptible impact upon it in a number of ways. Coal prices fell by more than a third after the arrival of the GNER. From 1849 there was a corn mill at Romanby next to the GNER station, and another next to the Leeds Northern station by 1861. In 1873 a new livestock market, supplying the residents of Leeds with meat and its tanners with animal skins, opened near the GNER station. Apart from marketing, small-scale commerce and agriculture, textile manufacture was a significant occupation in Brompton, a detached settlement to the north of the town. In 1823, there were 300 handloom weavers and by 1840, 249 looms. The weavers were mostly Primitive Methodists, supplementing meagre wages with agricultural work. In 1856, the first steam-powered weaving mill was established in Brompton. The local linen industry was to develop a political dimension over the following four

<sup>19</sup> This account of the borough is taken from *VCH, North Riding*, ed. W. Page, vol. 1, pp. 418-23, local directories from 1857 to 1901 and H. L. Fairburn, 'The Coming of the Railways: Social and Economic Change in Nineteenth Century Northallerton' (unpublished M.A. dissertation, University of York, 1997).



decades. The town gradually accumulated a range of administrative functions. The Riding's registry of deeds was established there in 1736 and, after the court house and house of correction were built between 1783 and 1785, the quarter sessions ceased to be peripatetic and met solely in Northallerton. Half a century later, the town became the centre of a poor law union, and the headquarters of the newly-created county constabulary were established there in 1856. Probably because of its relatively good railway connections, in 1889 the town became the meeting-place of the new county council, which a few years later occupied its own purpose-built county hall opposite the North Eastern Railway (formerly GNER) station.

The bishops of Durham had governed Northallerton from the eleventh century through their manor and, from at least the early-fourteenth century, by their seigniorial borough. The decay of the vestigial borough in the late-seventeenth century left behind a legacy of burgage tenements. These had been made the basis of the franchise of a parliamentary borough in 1640, created by an order of the House of Commons. The burgages, numbering some two hundred, were described as

merely stables, outhouses or cow houses in which the preservation of a chimney is both the sole remnant of humanity and of the right to vote. Others are let to poor persons at a small annual rent on condition of them keeping them in good repair. Many are totally ruinous or uninhabited. In some instances the vote is separated from the house by the practice of granting a lease for 999 years, subject to an annual peppercorn.<sup>20</sup>

They were progressively acquired by two local families, the Smelts of Kirby Fleetham and the Peirses, who had been long resident in Bedale by the time that John Peirse bought the manor in about 1657.<sup>21</sup> In the 1720s, an election address claimed that

Mr Smelt and Mr Peirse have engrossed at prodigious rates nigh half the borough by which means they will and one of them may when he sees an opportunity to buy some more which will enable him to send whatever representation for the Borough then she will be like her neighbour Thirsk, then there will be no treating no asking of votes but only application made to Mr....<sup>22</sup>

The Lascelles' interest had been purchased in 1744, when Edwin Lascelles had acquired the property of Leonard Smelt, the former M.P. for the borough, for £7,000

<sup>20</sup> Quoted in F. O'Gorman, *Voters, Patrons, and Parties: The Unreformed Electoral System of Hanoverian England 1734-1832*, (Oxford, 1989), p. 36.

<sup>21</sup> For the Peirse family, see *VCH* (see footnote 19) and for the Smelt family, see C. J. D. Ingledew, *The History and Antiquities of Northallerton* (London, 1858), p. 138. A survey of the Peirse estate in Northallerton in 1769 shows that Henry Peirse leased 411 acres and owned 214 acres with an annual value of £529. 19s. (University of York, Borthwick Institute, MD 793).

<sup>22</sup> North Yorkshire County Record Office [hereafter NYCRO], ZBA 24/2, Beresford-Peirse archives. The candidate at this election was Cholmondley Turner, against whom W. B. Wrightson's great-grandfather, the Tory, William Wrightson, fomented a riot when Turner stood as the Whig candidate in the York county election of 1741.

after finding him the post of receiver-general of the revenues for Barbados.<sup>23</sup> The two proprietors made an agreement to nominate one Member each in 1754.<sup>24</sup> At an uncertain date in the eighteenth century, Lascelles owned 44½ burgages and Pierce 49. They had obtained a 'nearly equal' number of burgages by 1779 and in that year agreed to collude rather than compete over future purchases to prevent sellers obtaining 'greatly advanced' prices by profiting from their competition.<sup>25</sup> The agreement was actively pursued and by 1793, they owned 27 burgages jointly, besides the 46 owned by Lascelles and the 52 owned by Peirse, which gave them control of 125 of the 202 burgages.<sup>26</sup> Each of the families returned one of the two MPs. Henry Peirse sat for the borough from 1713 to 1715 and again from 1722 to 1754. His son, also Henry, on coming of age in 1775, took over the Peirse seat and returned himself for the remaining fifty years of his life. A relative of the earls of Harewood was an almost perpetual occupier of the other seat.

Henry Peirse the younger had no son to succeed him and his estate was divided between his three daughters. Marianne remained a spinster living in Bedale. Another, Charlotte, married a Sussex squire, Inigo Thomas, and Henrietta, the third, married the elderly and distinguished Admiral Sir John P. Beresford.<sup>27</sup> In the absence of direct heirs, Sir John took over the family parliamentary seat in 1826. After a preliminary canvass, he stood down before the first election in 1832, sensing that he would be unsuccessful in the changed political climate.<sup>28</sup> He later took up another safe constituency, appropriately the Admiralty-controlled borough of Chatham, which he represented from 1835 to 1837. The reform of 1832 reduced Northallerton to a single-member constituency and widened its boundaries to include Brompton and Romanby. There were 294 houses in the new constituency of value of at least £10, the minimum to give the occupiers the parliamentary borough franchise. Such a change decisively disrupted the traditional arrangements, and the Lascelles interest temporarily went into retreat. A new Peirse protegee was needed and by far the most likely candidate was the son in law of one of Henry Peirse's co-heiresses. This was W.B. Wrightson who had married Georgiana, the daughter of Charlotte Peirse, Mrs Inigo Thomas, in 1821. As a Whig like his father and a Peirse

<sup>23</sup> West Yorkshire Archive Service, Leeds [hereafter WYASL], Lascelles of Harewood, item no. 717, Deed of 12 Oct 1744; and Ingledew, *History and Antiquities of Northallerton*, p. 138.

<sup>24</sup> NYCRO, ZBA 24/30, Beresford-Peirse archives.

<sup>25</sup> NYCRO, ZBA 24/ 40 and 41, Beresford-Peirse archives; and WYASL, Lascelles of Harewood, Official Box papers (contents unnumbered), Deed of 28 August 1779. Correspondence relating to the purchases of the burgages is to be found in NYCRO, ZBA 24/ 23, 31-37, 49-52, 56 and 60, Beresford-Peirse archives.

<sup>26</sup> WYASL, Lascelles of Harewood, Official Box papers (contents unnumbered), Estate (Surveys), Book of references to a plan of the borough of Northallerton, item no. 32a.

<sup>27</sup> His biography is to be found in *ODNB*, vol. 5.

<sup>28</sup> On the importance of the canvass, see P. Salmon, *Electoral Reform at Work, Local Politics and National Parties, 1832-1841* (London, 2002); also E. W. Cox, 'Hints to Solicitors for the Conduct of Elections' of 1868, reprinted in Dod, *Electoral Facts 1832-1853*, pp. xlv-lxviii.



grandson-in-law, who had previous experience of the hustings at Retford and of actually sitting for Hull, he had more than the family connection to qualify him for Northallerton.

#### THE MEMBER FOR NORTHALLERTON

No doubt Wrightson felt reasonably assured of entering into his political patrimony by right of his wife, after informing the Earl of Harewood of his intentions and receiving the news from one local supporter that 'No anti-reformer whatever has any chance of being returned and that not even Sir John's popularity will stem to [sic] popular feeling.'<sup>29</sup> Unfortunately, there was already a pro-reform candidate in the field. This was Captain J. G. Boss of nearby Otterington Hall who had appeared before Sir John Beresford decided to stand aside.<sup>30</sup> Boss judged the independent mood of the newly enfranchised burgesses acutely, making great play of being a genuine reformer and independent, contrasting himself with Wrightson as the 'nomination candidate', put forward by the owners of the former parliamentary burgages. One of Wrightson's supporters was subjected to a threatening letter from Captain Swing and he himself was the recipient of several pages of closely reasoned abuse from a radical correspondent signing himself 'Le Jour Viendra'.<sup>31</sup> Boss was successful, Wrightson losing to him by 97 votes to 108. At the next election, however, Boss stood down after an initial canvass, leaving Wrightson to take the seat unopposed.<sup>32</sup> In 1837, Wrightson again enjoyed a clear field once Edwin Lascelles had withdrawn after canvassing.<sup>33</sup> In 1841, the improving fortunes of the Conservatives led Lascelles to reassert his family interest in the borough and stand against Wrightson, although he lost by 114 votes to 129. The cost, however, was heavy, for Wrightson's election expenses that year were £2,331, substantially more than he had been obliged to spend on each election in Hull. Wrightson recorded his total 'election expenses' annually from 1830 to 1841, but it is not possible to be certain that they were all incurred in his own constituency. In these years he spent, on average, a tenth of his income in this way, in all £10,693 out of a total income of £89,371. Of this, £1,437 was spent in 1835 and £884 in 1847.<sup>34</sup> Two more unopposed elections were followed by another Lascelles - Wrightson contest in 1857, won by a margin of only three (129 to 126), and thereafter every election was contested. In 1859, Wrightson won again and by a similarly

<sup>29</sup> DA, DDBW/F7/57, Edwin Lascelles to W. B. Wrightson undated, watermark 1835; DA, DDBW/F7/46, Henry Tower to W.B. Wrightson, 1 July [1832].

<sup>30</sup> Ingledew, *History and Antiquities of Northallerton*, p. 132; and DA, DDBW/P114, Boss' election address. M. Stenton, *Who's Who of British Members of Parliament, volume I, 1832-1885* (Hassocks, 1976), p. 41, wrongly describes Boss as resident at Otteringham, which is located in the East Riding, rather than Otterington, which is a few miles south of Northallerton.

<sup>31</sup> DA, DDBW/F7/48 and 50.

<sup>32</sup> Ingledew, *History and Antiquities of Northallerton*, p. 133.

<sup>33</sup> Ingledew, *History and Antiquities of Northallerton*, p. 134. Election statistics for Northallerton are to be found in F. W. S. Craig, *British Parliamentary Election Results 1832-1885* (London, 1977), p. 223.

<sup>34</sup> DA, DDBW/A25, Private Account Book 1828-1837.

narrow margin of 138 to 136. One consequence of this repeatedly close competition was played out as low comedy after the election of 1859, when the Yorkshire summer assizes was enlivened by a civil lawsuit over the supposed abduction of a vital voter. Returning the worse for wear after the poll had closed, he had been 'immediately recognised as the "missing man"' at the railway station. The case collapsed when it became clear that the man had needed no encouragement to absent himself on a drunken spree in the dales rather than stay to vote Liberal as his domineering father had demanded. Indeed, the unfortunate if weak-willed son appears to have been the victim of paternal abduction at the previous election, being held in close confinement by two elderly ladies until the Wrightson carriage arrived to carry him away to the polls.<sup>35</sup>

It was perhaps the closeness of these contests that led both sides to consider ways of improving their chances of success. Wrightson appears to have chosen a traditional method through aiming to secure his influence by becoming a major local landlord. His purchases began in 1860 and in the years between 1861 and 1863 he poured £20,045 into acquiring property, almost exclusively in Brompton, which in 1874 accounted for 248 of the borough's 837 registered electors. By the time of his temporary withdrawal from the constituency in 1865, he had spent £24,475 and he continued to buy until by 1872, when his expenditure had reached £39,335.<sup>36</sup> Apart from any political advantage this may have brought him, it was - unlike the political investment that the Elliots were later to make in Brompton - a financially profitable one. In 1867-8, these properties accounted for a tenth of his income from all sources, or about £1,940 out of a total of over £18,000.<sup>37</sup> The earls of Harewood had long been major landowners in the district and he probably wished to stand on an equal footing with his historic rivals. C. H. Mills, a local landowner, who succeeded Lascelles in 1859 and 1865, looked to local industry rather than landed property to obtain an advantage. Taking the Conservative challenge into the nucleus of factory workers in the constituency, where it was said the 'duck workers are Liberal to a man and sound to the core',<sup>38</sup> he became involved in a linen factory at Brompton. This was probably the firm of Maynard, Fowle and Co., since Thomas Fowle was the Conservative election agent and Wrightson's supporters cryptically claimed that it had 'been established for an illegal purpose'. The aim of the business was to challenge the supremacy of the existing firms of John Wilford and Sons, and William and John Pattison, both of whose owners were Liberals who, Mills claimed, were 'grinding down their operatives to the lowest depth of poverty to gain themselves riches'. These Liberal businessmen were also goaded into publishing a joint declaration that their employees could vote as they wished. In taking their challenge into Brompton, the Conservatives had to contend with the denominational and social susceptibilities of

<sup>35</sup> *Leeds Mercury*, 28 May and 16 July 1859. I owe these references to Dr Malcolm Chase.

<sup>36</sup> Calculated from the Northallerton title deeds in DA, DDBW/D/YN. The electoral register for 1874 is at DA, DDBW/P/146.

<sup>37</sup> DA, DDBW/E2/12, Rental, 1867-68.

<sup>38</sup> Bishopsgate Institute, Howell 11/2A/11, 'Report as to Northallerton', p. 1, in Reports on Borough Constituencies, 1868.



its long-established nonconformist residents. These were provoked in a dispute during the general election campaign of 1868, which led to the publication of an election poster by 'Roundhead', who claimed that because the Conservative candidate 'prays in the Squire's Pew in a State Church, and you choose to worship in a more lowly building, though socially as respectable as himself, he cannot take common ground with you'.<sup>39</sup>

The 1865 election saw the end of Wrightson's career in parliament. After initially appearing as a candidate he withdrew, partly, it seems, because of local Liberal preference for a younger man. The closeness of the electoral chances of the two parties also appears to have stimulated an interest in registering new voters, for the electorate increased by two-thirds between 1859 and 1865, from 283 to 442. Since the population in the constituency was falling slightly, this can only have been the result of registration activity by the parties. The Conservatives may have been principally responsible for this and it was certainly to their benefit for in 1865 they took the seat by a greatly increased margin of 239 to 190.<sup>40</sup> Unfortunately, the outcome was a debacle, for the successful Conservative was then unseated for bribery. A select committee of the House of Commons found two proven cases, both involving offers of rent concessions by the agent to a farmer and to a pig jobber.<sup>41</sup> The election that followed in 1866 saw a resurrection of a Wrightson-Lascelles contest, and this also resulted in an undisputed Conservative victory, although with a slightly smaller majority (224 to 201). The relatively large Conservative poll was attributed to the proposal by Russell's government to abolish the constituency, combining Northallerton with neighbouring Richmond, and its handling of the epidemic of cattle plague.<sup>42</sup> Wrightson did not contest the constituency in 1868, when the general election again produced a Conservative success by a much narrower though more usual margin of 386 to 372, after the electorate had been increased from 442 to 808 as a result of the parliamentary reform act of the previous year. A Liberal petition alleging malpractice failed to dislodge the victor, and in 1874 the Liberals turned again to Wrightson.<sup>43</sup> The decision to recall so elderly a campaigner probably reflects a wider failure amongst local Liberals to realise that traditional political attitudes were in

<sup>39</sup> The quotations here are taken from *Yorkshire Gazette*, 12 May 1866 and an election poster dated 4 Nov. 1868 (NYCRO, ZLD 1/41). For Thomas Fowle, see an unidentified newspaper report of the Northallerton nomination meeting, 9 May 1866 (DA, DDBW/P145). The declaration by J. Wilford and Sons and W. and J. Pattison, 6 Nov 1868, is to be found at NYCRO, ZLD 1/43.

<sup>40</sup> It has not been possible to investigate this matter in detail as electoral registers, apart from that for 1874 (DA, DDBW/P/146), appear no longer to survive.

<sup>41</sup> Minutes of Evidence etc. taken before the Select Committee in the Northallerton election petition, *Parliamentary Papers*, 1866, no. 223, vol. xl, especially pp. 42 and 58.

<sup>42</sup> *Yorkshire Gazette*, 12 and 19 May 1866; DA, DDBW/F7/66, letter from H. Brand (H.M. Treasury) to W. B. Wrightson, 7 May 1866.

<sup>43</sup> For the hearing of the bribery case, see E. L. O'Malley and H. Hardcastle, *Reports of the Decisions of the Judges for the Trial of Election Petitions in England and Wales*, vol. 1 (London 1870), pp. 167-73.



need of revision in face of the widened franchise after 1867, despite the intervention of the Reform League. Northallerton was one of those constituencies targeted by the League in which 'the great difficulty is that the old party managers do not realise the altered state of matters and if they do they are extremely slow to coalesce with the new men'. The report provided to the Reform League in 1868 presented a picture of Conservatives furiously active in the revision courts and the Liberals unorganised, although 'both electors and parties were characterised by bribery, each party being alike'.<sup>44</sup>

In this contest between 'a political neophyte and a politician whose hair had whitened with more than the allotted span of human life', the 85-year-old faced an opponent of a new kind. G.W. Elliot was an outsider and his wealth came not from land but from industry. His father, (Sir) George Elliot, had begun life as a pit boy, and was by this time a mechanical engineer and a major colliery owner in the North East and South Wales. In the words of the Earl of Derby, he was 'a great coal-owner in the north' and one of three 'millionaires, respectable and warm supporters' given baronetcies by Disraeli after the election of 1874.<sup>45</sup> Besides his own political ambitions, Elliot fostered those of his son and so, as the father stood for South Durham, his son staked a claim for Conservatism in Northallerton. Sir George bought up the Conservative linen factory and kept it going at a loss for many years for his son's political benefit. In a tacit bid for a peerage submitted to the Earl of Salisbury he claimed that he 'maintained a large local industry in Northallerton at a considerable annual commercial loss'.<sup>46</sup> The Northallerton firm was probably the Northallerton and Brompton Linen Manufacturing Co., later the Northallerton Tarpaulin, Brattice Cloth and Linoleum Co. Ltd, seemingly the successor to Maynard, Fowle and Co. which no longer appeared in the directories. The new company had both a manager (rather than an identified owner) and an office in London and does not appear in the directories after the death of Sir George in 1895. In the election of 1874, there was, as often before, a close contest, for barely one per cent of the poll (387 to 378 votes) separated his young, successful opponent from the 'old and veteran Liberal' who now finally abandoned the political stage. Elliot consolidated his position in his new constituency in the following election of 1880, after a further

<sup>44</sup> H. J. Hanham, *Elections and Party Management. Politics in the Age of Disraeli and Gladstone* (London, 1959), p. 337, quoting a letter of 8 Oct 1868 from Glynn to Gladstone; Bishopsgate Institute, Howell 11/2A/11, 'Report as to Northallerton'.

<sup>45</sup> *York Herald*, 4 Feb 1874. For Elliott senior, see R. Church, *The History of the British Coal Industry, Volume 3 1830-1913: Victorian Pre-eminence* (Oxford, 1986), pp. 146, 413, 444-5, 454, 466 and 544; *ODNB*, vol. 18; and R. Shannon, *The Age of Disraeli, 1868-1881: the Rise of Tory Democracy*, (London, 1992), p. 260.

<sup>46</sup> Hatfield House, Papers of the Third Marquess of Salisbury, reference 3M/E/Elliott. The claim in H. J. Hanham, *Elections and Party Management*, pp. 260-1 that the Northallerton factory had cost Sir George £120,000 to buy is mistaken. The sum actually related to expenditure in Whitby to bolster the electoral successes of Edmund Beckett. I am grateful to Mr. R. Harcourt-Williams, librarian and archivist at Hatfield House, for this information.



campaign for electoral registration, which increased the number of electors by a tenth from 829 to 912. Against the national trend, he was returned with a substantially increased majority of 100.

#### WRIGHTSON'S PARLIAMENTARY CAREER

In the course of his thirty-five years in the Commons, Wrightson spoke on the floor of the House on sixteen occasions. Half of these were in the 1830s: three times in 1831, two in 1836, two in 1838 and one in 1839. He spoke three times in the 1840s (in 1841, 1843 and 1848), four in the following decade (1855, twice, 1858 and 1859), and then once again in the closing weeks of both the session and his parliamentary career in June 1865.<sup>47</sup> Only twice did he speak at any length. His first intervention was on the Game Laws Amendment Bill (speaking in favour of a government-sponsored measure).<sup>48</sup> As a considerable landowner, it was natural that he should have also have strong views on the Tithe Commutation Bill of 1836. He made his longest speech (taking up nine columns in the *Parliamentary Debates*), on the abolition of the Corn Laws in 1843, although he was silent during the great debates of three years later. However, he also addressed the House on subjects that may not seem to fall naturally within his expected sphere of interests. His second longest speech was on the proposed Irish poor law and his five appearances in *Hansard* in the 1850s occurred because of his sponsorship of an abortive Bill on a constitutional matter.

The commutation of tithes was one of the major innovations of the reforming administrations of the 1830s. The government was more concerned to enact a measure that introduced compulsory commutation than to be prescriptive about its contents, and it displayed a great degree of flexibility over the details of the Bill. The tenor of the debates and amendments was to permit greater discretion to the tithe commissioners in dealing with local circumstances and existing local agreements than the Bill initially intended.<sup>49</sup> Wrightson was one of those who spoke and voted in favour of such flexibilities. In the debate on clause 34, which imposed principles of valuation on the commissioners, he was the principal speaker in favour of its deletion. He argued that the basis of commutation as proposed would penalise owners and occupiers who had invested in the techniques of 'high farming' on the assurance of agreed tithe compositions that would not penalise the increased levels of output that followed from higher levels of investment. Three other members spoke in support of his proposal, two of them from the West Riding. The defence of the government for this clause fell to the Solicitor General, who was Wrightson's university friend, the recently-knighted Sir Robert Rolfe. Whilst the clause received

<sup>47</sup> The occasion was the close cutting of boys' hair on first imprisonment, on which Wrightson made a brief observation: *Parliamentary Debates*, volume 179, 9 June 1865, column 1334.

<sup>48</sup> *Parliamentary Debates*, volume 5, 8 August 1831, column 940.

<sup>49</sup> E.J. Evans, *The Contentious Tithe, The Tithe Problem and English Agriculture 1750-1850* (London, 1976), pp. 125-6 and E.J. Evans, *Tithes and the Tithe Commutation Act 1836* (London, 1978), p. 13

the endorsement of the House, it was by so narrow a margin (78 votes to 70) that the Home Secretary, Lord John Russell, met with Wrightson and other opponents and agreed a compromise. Before the meeting, this group agreed on an alternative clause based on past payments, but one that gave the commissioners discretion to make an increase or decrease of up to 10 per cent. According to Wrightson's claim many years later, the Bill subsequently included the discretionary margin of 20 per cent that he had subsequently proposed himself. After his retirement, in gathering together the shards of his backbench career, he privately published a pamphlet in which he contended that the Act 'has been carried into effect so quietly that it appears to have scarcely attracted as much public attention as its importance deserved'. In this the most recent historian of the subject is in full agreement.<sup>50</sup>

The occasion of Wrightson's second speech in the House was a petition introduced by Daniel O'Connell in September 1831 requesting poor law provisions to be extended to Ireland. He objected that such a step 'would only be alleviating one class of persons by the ruin of another. Every shilling that would be applied to the relief of the poor must be taken from productive labour'.<sup>51</sup> There had never been any statutory poor relief in Ireland as there had been in England since 1601. By the end of the 1820s this had become a subject of lively public debate, principally prompted by the increasing influx of Irish labourers into England and its consequences for poor rates there. The debate over Ireland was complicated by the belief of some controversialists that the only effective method of relieving poverty was not the narrow issue of poor relief but the possibility of reducing Irish poverty through a co-ordinated programme of economic development.

To the classical economists, David Ricardo and T. R. Malthus most prominent amongst them, the English poor law, by encouraging idleness, lack of thrift, and dependence on the state, self-evidently encouraged population growth and inhibited economic growth.<sup>52</sup> Amongst the younger generation of economists, Nassau Senior, who held the Drummond chair of political economy at Oxford, was in favour of granting poor relief in Ireland to those who were not able-bodied (although not to the aged who, through foresight, should have provided for their incapacity), but denying it to those able to offer themselves for work. The position of the able-bodied poor, he believed, could be improved by state-sponsored development schemes and subsidised emigration.

In 1830, Wrightson's university friend, Thomas Spring Rice, successfully proposed in the Commons the appointment of a select committee on the condition of the Irish poor. It recommended in its report a score of Bills to improve their condition,

<sup>50</sup> [W. B. Wrightson,] *Tithe Commutation* (London, printed by W. Ridgway, no date, but 1870) (DA, DDBW/P/130) and *Parliamentary Debates*, vol. 33, May 13 1836, cols 960-71.

<sup>51</sup> *Parliamentary Debates*, vol. VII, 26 Sept 1831, col. 594.

<sup>52</sup> The issue of the poor laws and Ireland is treated in R. D. Collison Black, *Economic Thought and the Irish Question 1817-1870* (Cambridge, 1960), ch. 4; A. Macintyre *The Liberator: Daniel O'Connell and the Irish Party 1830-1847* (London, 1965), ch 6; and I. Newbould, *Whiggery and Reform, 1830-1841*, (Stanford, California, 1990).



including public projects and emigration, but excluding the introduction of statutory poor relief. The report, however, had no practical consequences. Three years later, the government decided to set up a royal commission on the subject, with Richard Whately as chairman who, besides his position as Anglican Archbishop of Dublin, had also occupied the Drummond chair in succession to Senior. The nine members of the commission naturally included those interested in Irish affairs but also amongst their number was W. B. Wrightson. His appointment was almost certainly to have been the result of his friendship with Spring Rice, who knew of his interest in, and his views on, poor law matters.<sup>53</sup> The commission took two years to produce its first report and its third and final report appeared in 1836. Its conclusions proposed a wide programme of measures for the improvement of the Irish poor, rejecting as inappropriate a poor relief system like that introduced by the government into England and Wales in 1834. It contended that the deterrent workhouse, the central feature of the new poor law, was not appropriate in an economy like Ireland's where workers were willing to work but where none was available.

The commission's range of recommendations, however, did not appeal to the government and to Whately's chagrin - dismissed with splendid aristocratic disdain by Lord Melbourne - it cast around for a simple, politically plausible solution.<sup>54</sup> There was an interval of ten months between the publication of the final report of the commission in April 1836 and the introduction of the government's legislative proposals in February of the following year. These were limited to the introduction of the poor law to Ireland. This, however, did not extend to the absolute right to relief embodied in the English poor law, a limitation that was to prove literally fatal in the potato famine of the following decade. The death of William IV in June 1837 led, for the final time, to the prorogation of parliament on the death of a monarch and the temporary loss of all proposed legislation until the new session. In the intervening period, the supporters of the royal commission's solutions sought to influence opinion in their favour.

Wrightson made a significant contribution to the debate in an article in the *Edinburgh Review* in October 1837.<sup>55</sup> The appearance of the article at this time was probably prompted by Wrightson's friendship with Empson, who was now the editor of the *Edinburgh*. Wrightson wrote at length on the problems created by the unreformed poor law in England that had reduced labourers to a position of dependence on public relief - pauperism - whose radical remedy was to be found,

<sup>53</sup> DA, DDBW/P/121, an undated draft of a letter to Rice, in which Wrightson says, 'you have called upon me for an opinion to the practical amendment' [of the poor laws].

<sup>54</sup> According to Collison Black, *Economic Thought and the Irish Question*, p. 110, fn. 1, Melbourne's response to Whately's complaints was simply to observe that 'This is what comes of appointing university tutors to great offices'.

<sup>55</sup> Wrightson's authorship is confirmed by F. W. Fetter, 'The Authorship of Articles in the *Edinburgh Review*', *Journal of Political Economy* 61:3, 232-59. What are likely to be Wrightson's notes for the preparation of the article are to be found at DA, DDBW/P/119-20 and 122-3.



'and happily found, in the new Workhouse System'. He expressed the view that the commissioners' reports had 'gone somewhat beyond the strict object that the government had in view in their appointment', arguing that it was beyond the terms of reference to propose measures for the indirect rather than the direct benefit of the poor. In respect of the poor law proposals, the article argued in favour of the plan to exclude the able-bodied from public relief: 'It is no act of real kindness to teach the peasant to rely upon the public', he wrote, whereas the government bill was objectionable because it would admit them.<sup>56</sup> The general and specific criticisms led Whately to remark to Senior that the (anonymous and as then unidentified) writer 'is a severe, and (as is natural for me to think) an unfair critic of some part of our Report' although Whately clearly believed that the article would help to make the commission's case.<sup>57</sup> In another letter to Senior, Whately wrote condemning the government's proposed 'rash measures' but adding that 'By the help of Wrightson and Blake I hope we may avoid such extremities'. Wrightson's remarks, and Whately's comments, implicitly suggest that he had actually played only a peripheral role in the business of the commission.<sup>58</sup>

However, the government persisted in its plans, and the Bill was presented to the Commons in December. Wrightson intervened at the committee stage when he spoke in favour of an amendment by Frederick Shaw, the member for Dublin University and the leader of the Irish Conservatives, 'to limit relief to the lame, impotent, old and blind'.<sup>59</sup> In a speech occupying three columns in *Hansard*, Wrightson rehearsed the economic objections to the government's intentions. The speech gained the support of O'Connell (since cross-party support for the measure meant that he could abandon his pro-government position), criticised Lord Morpeth, the government spokesman for the Bill, and was followed by Wrightson's appearance in the division lobby for the ayes in mostly Conservative company, where the amendment was lost by 75 to 134 votes.

Like tithe commutation, the Corn Laws were one of the key issues of the period. Whilst he can be counted, at least in the end, as one of the Yorkshire gentry and aristocrats opposing agricultural protection, Wrightson was not initially a free-trader, although he was critical of the excessive import duties imposed by 'the injudicious friends of the farmer' when the corn laws were made more stringent after 1815.<sup>60</sup> In

<sup>56</sup> The quotations are taken from *Edinburgh Review*, LXVI, Oct 1837-Jan 1838, pp. 190, 198 and 205.

<sup>57</sup> See E. J. Whately, *Life and Correspondence of Richard Whately D.D.* (London, 1866), vol. 1, p. 400.

<sup>58</sup> The reports of the commission give no indication of the role played by individual commissioners. The only identifiable contribution by a specific commissioner is that of J. E. Bicheno, the author of 'Remarks on the Evidence taken by the Poor Inquiry (Ireland)' contained in Appendices (D.) (E.) (F.), published as part of the report of the commission. For Bicheno, see his entry in *ODNB*, vol. 5.

<sup>59</sup> For Sir Frederick Shaw, see his entry in *ODNB*, vol. 50.

<sup>60</sup> J. T. Ward, 'West Riding Landowners and the Corn Laws', *English Historical Review* 81 (April 1966), 256-72.



his Northallerton electoral address in 1841, he argued that

Nothing is clearer to me than that Land is entitled to benefit, in consideration of the unequal burden it bears. The question is, how much? If we are unreasonable, the Free Trader will rush in and we will lose everything in the shape of protection. Then indeed there will be cause for alarm among the Landed Proprietors! <sup>61</sup>

In his speech in parliament in 1843, he decried the restrictive legislation (the most stringent provisions of which he claimed originated only in the post-Napoleonic period) that prevented, for instance, the exchange of Yorkshire cloth for French corn and that went far beyond that 'fair object' of obtaining a 'fair remunerating price' for the grower. After the repeal of the corn laws, he was content to endorse the benefits of free trade, but also able, as a landowner himself, to commiserate with the farmers amongst his electorate on the adverse transitional effects of the repeal. Writing on the general benefits of 'Free Trade in Food', he added:

One exception there undoubtedly is, in the class to which I myself, and many of you belong; and perhaps the promoters of this valuable enactment would confess candidly that in the transition, a blow has fallen more severely in that quarter than they had ever anticipated. <sup>62</sup>

Wrightson made three attempts, in 1855, 1858 and 1859, to promote his last unsuccessful project in the House, which can be seen as a late example of what has been described as 'Foxite Whig constitutionalism'.<sup>63</sup> This was a Bill to amend the law on the election of ministers. Since 1707 it had been necessary for any MP appointed to an office of profit under the Crown to resign his seat and to go through the process of re-election to the House.<sup>64</sup> This provision was believed to apply not only when a minister was first appointed, but also when he merely took up a different office. Wrightson's Bill consisted of one clause that allowed a change of office, rather than a first appointment, to take place without the need for re-election. It was, perhaps, particularly apposite that Wrightson should promote such a measure, both as the son of a Foxite Whig, and given the former character of the constituency that he represented. It was generally agreed that the sole advantage of proprietary boroughs was that they provided an opportunity for ministers to be saved the cost and complication of a double election. Wrightson was not proposing any radical or even innovative constitutional change by his Bill. An amendment of the Act of Succession of 1707 had been considered at the time of the Reform Bill and on several subsequent occasions. Between 1833 and 1867, over a quarter of all by-elections had been made necessary by this provision of electoral law. Objection to it arose from the reluctance of other backbenchers to dispense with an established constitutional principle that entailed inconvenience to only a small number of MPs and, in the

<sup>61</sup> NYCRO, Z57/24, Northallerton election address, 29 May 1841.

<sup>62</sup> DA, DDBW/P141, Northallerton election address, 26 June 1852.

<sup>63</sup> See M. Taylor, *The Decline of British Radicalism, 1847-1860* (Oxford, 1995), pp. 6-7.

<sup>64</sup> The Act of Succession, 6 Anne cap. VII (1707), sec. 26.

unusually fragmented state of the parties in these years, the concern that, without re-election provisions, ministerial coalitions could arise that conflicted with the results of a general election. In 1855, the Bill failed by four votes (69 to 73), and in 1858 it fell by seventeen (91 to 108). At the third attempt in the following year, it narrowly missed success by only two votes (51 to 53), although Wrightson did not choose to raise the matter again.<sup>65</sup> The 1707 Act continued to act as a political irritant for many decades into the future, although amended by the Representation of the People Act, 1867.<sup>66</sup> Both Gladstone in 1873 and Winston Churchill in 1908 fell foul of this constitutional convention before the law was amended in 1919 and then again in 1926 to make the necessity for re-election redundant.<sup>67</sup>

## CONCLUSION

Wrightson's political views, those of a Whig of the 1830s, appear to have remained remarkably unchanged throughout his parliamentary career. As may be expected of a major landowner, and one who deliberately built up his position as a landlord in his own constituency, he held a firm belief in the legitimacy of landed influence. Commenting in 1866 upon the recent electoral corruption in his constituency, he contrasted such activities with the 'noble family of Harewood' who

had a large national interest, which he should be sorry to see suppressed, of a large territorial possession, which, of course, produced an influence which was not to be objected to by any reasonable minds. ... They had the legitimate weapons at command and they ought to use them and no other.<sup>68</sup>

Similarly, he had claimed in 1852 that the 'establishment of Free Trade in food' ought to be followed by 'as light a proportionate Taxation' on agriculture as was possible. As a Whig, he had naturally been unable to approve of the Derby - Disraeli administration of 1851-2, but was prepared to give qualified support to the Peelite Lord Aberdeen. It is not unexpected to find that the most congenial administration to him was that of a fellow Whig, Lord Palmerston, to whom he was able to give his 'cordial adherence' as a result of a well-managed war in the Crimea, an 'honourable peace' and a swift and substantial reduction in military expenditure thereafter.<sup>69</sup> His unchanged political outlook infused a touchingly antique air into his election address in 1874. In it he contrasted the failures of a Tory government with the successes of their opponents, but the Tories of whom he wrote to the electors of Northallerton were not the party of Lord Derby and Disraeli but of Lord Liverpool

<sup>65</sup> *Parliamentary Debates*, vol. 137, 14 March 1855, cols 532-3; vol. 137, 29 March 1855, cols 1279-82; vol. 148, 13 February 1858, col. 1544; and vol. 154, 5 July 1859, cols 704-6.

<sup>66</sup> 30 & 31 Vict. cap. CII, sec. 52 and Schedule (H) exempted senior ministers and certain officers of the royal household (that is, the whips) from the need for re-election.

<sup>67</sup> M. Pugh, "'Queen Anne is Dead': The abolition of ministerial by-elections 1867-1926", *Parliamentary History* 21:3 (2002), 351-66.

<sup>68</sup> DA, DDBW/P145, unidentified newspaper, 9 May 1866, Report of the nomination meeting at Northallerton.

<sup>69</sup> DA, BW/P142 and 143, Election addresses of 23 Mar 1857 and 9 Apr 1859.



and his colleagues of fifty years earlier. Their admirable opponents were not the Gladstonian Liberals, who had been in power for the last six years, but the supporters of the administration of earl Grey in 1830, whose watchwords, 'Peace, Retrenchment, and Reform', had continued to be Wrightson's political touchstones in the decades that followed.<sup>70</sup>

In reporting the death of W. B. Wrightson at his London home at 22 Upper Brook Street in 1879, *The Times* captured in a few words what by then was the outmoded attitude of the deceased, describing him as 'a moderate Liberal in politics and a staunch supporter of Earl Grey'.<sup>71</sup> By this time, as the obituary noted, he was the oldest member of Brooks's Club and it was indicative of his assured social position that he had been a member of Grillions, a select parliamentary dining club, for many years whereas Disraeli had gained admission to it only in 1865.<sup>72</sup> A few years after his death, the political landscape that characterised Wrightson's parliamentary life was changing almost out of recognition. The parliamentary franchise, extended in 1867 shortly after his parliamentary career had closed, was widened again in 1884. In the following year, his constituency was abolished and absorbed into Richmond, as had been threatened two decades earlier. G. W. Elliot, his final opponent, represented the new constituency from 1886 until his death in 1895.<sup>73</sup> Liberalism itself had changed with the split between Gladstonian Liberals and the Liberal-Unionists. Locally, a symbol of the final demise of Whiggism could be seen in the membership of the Richmond Division Conservative Association. Amongst their number, alongside Elliot, was H. Beresford-Pierce, Wrightson's nephew and the inheritor of Bedale Hall, who, by 1895, had become the Association's chairman.<sup>74</sup>

<sup>70</sup> *Northern Echo*, 27 Jan 1874. I owe this reference to Mr R. Coulthard, to whom I am grateful for conducting a lengthy but otherwise unsuccessful search for references to Northallerton elections in the Darlington newspapers.

<sup>71</sup> *The Times*, 14 Feb 1879.

<sup>72</sup> DA, DDBW/F7/66 and R. Blake, *Disraeli* (London, 1966) p. 435.

<sup>73</sup> Craig, *British Parliamentary Election Results 1885-1918*, p. 428. He was succeeded by J. Hutton, the Conservative who had stood at Northallerton in 1868.

<sup>74</sup> NYCRO, ZBA 24/4/11.





## ARCHBISHOP HARCOURT'S RECRUITMENT OF LITERATE CLERGYMEN: PART 2. CLERICAL SEMINARIES FOR LITERATES IN THE DIOCESE OF YORK, 1800-1849.

By Sara Slinn

*Part 1 of 'Archbishop Harcourt's Recruitment of Literate Clergymen', examined the nature of the reliance of York diocese on non-graduate recruits to the clerical profession. Part 2 examines how these 'literate' men prepared for ordination, focusing particularly on the operation of 'tutors for orders' in the diocese. In the first two decades of the nineteenth century, both the Church Missionary Society and the Elland Society made considerable use of certain tutors to prepare their protégés for ordination. John Buckworth, vicar of Bradford, Edward Parkin, curate of Slaithwaite and others co-operated in preparing men both for the mission field and the home ministry. The Elland Clerical Education Society made great use of Thomas Rogers of Wakefield, Samuel Knight of Halifax and Walter Smith of Almondbury, men whose own education had been funded by the Society. From 1827 Harcourt sought to regulate how literates prepared for orders and, as part of this, he appointed certain clergy to give approved preparation. The most significant of these men were James Knight of Halifax, Thomas Rogers of Wakefield, James Bardsley of Wilsden and William Snowden of Bawtry and Swillington. But by the 1840s graduates were willing to take almost all the titles in the diocese which meant that these small seminaries became redundant.*

### INTRODUCTION

In the first years of the nineteenth century the diocese of York was not able to attract enough graduate candidates for Holy Orders, and was reliant on literate men, who had not studied at University, to supply the deficit. Between 1800 and 1824 literate candidates actually comprised the majority of successful ordinands for titles in the diocese, the peak of non-graduate recruitment into the diocese being in 1818, when just over three quarters of candidates had not received a University degree.<sup>1</sup>

As publicly accepted as the 'university-gentleman' norm for clergy might have been, Harcourt's domestic policy on recruitment did not, and whilst there was an actual shortage of graduates offering themselves as candidates, could not, make any demands about the educational background of its clergy. It is important to bear in mind that a university education was admitted even at the time to be more about providing a common cultural bond than about any particular practical knowledge essential to the exercise of a priest's duties. Harcourt's base mark for clerical fitness was quite simply those qualifications laid down in Canon 34: character testimonials and proof of learning sufficient to fulfil priestly duties, judged by examination in

<sup>1</sup> Sara Slinn, 'Archbishop Harcourt's Recruitment of Literate Clergymen. Part 1: Non-Graduate Clergy in the Diocese of York, 1800-1849', *YAJ* 80 (2008), pp. 167-187.

the period leading up to ordination. If a man could demonstrate all this, and had been offered a curacy in which to exercise his duty, then he was fit to be ordained.

Men prepared for ordination in a variety of ways, and it was fairly common for men who had graduated from university to spend some time before ordination with a 'tutor for orders'; a degree at Oxford or Cambridge did not necessarily equip a man with the necessary knowledge and skills to pass bishops' ordination examinations. What was required by canon law was that the candidates were 'learned in the Latin tongue and sufficiently instructed in Holy Scripture', but how this was interpreted was up to bishops and their examiners. It has often been assumed that there was a great deal of laxity in these examinations, but it should be noted that failure was not at all uncommon in the York diocese and it was not restricted to men without a university education.<sup>2</sup> We have some insight into the content of the examinations. William Taylor, a candidate for deacon in 1819, explained his failure by saying he had prepared the New Testament, but that the examiner asked him about the Old Testament, especially the chronology and history of the Judges and Kings.<sup>3</sup> Thomas Poole, ordained deacon in 1838, passed with 'great credit' having been examined in Hebrew, Latin and Greek, and having written on a divinity question.<sup>4</sup> James Haywood was found to be deficient in reading and translating Grotius.<sup>5</sup> Certainly preparation was necessary, particularly for men who did not have a strong background in classical studies. And this preparation was provided by numerous parish clergy who, motivated to different degrees by a desire to supplement their incomes and a willingness to be useful to the Church, were generally termed 'tutors for orders'. Some of these tutors developed their enterprise to the point where they were described as clerical institutions or seminaries. By 1827 Archbishop Harcourt had harnessed certain 'tutors for orders' and clerical institutions in the diocese of York for his own ends, separating the literate wheat from the chaff by accepting, at least in theory, only those literate candidates who had studied with one of those tutors the archbishop had approved. Thus, the graduate deficit experienced by the diocese was plugged by the acceptance of non-graduates who had undergone preparation in an authorised manner. At the same time Harcourt had somewhere to send graduate candidates who fell short of the

<sup>2</sup> S. C. Carpenter, *Church and People, 1789-1889*, (London, 1933) pp. 255-6; C. K. Francis Brown, *A History of the English Clergy, 1800-1900* (London, 1953), pp. 240-4; A. Tindal Hart, *The Curate's Lot* (London, 1970), pp. 169-70; F.W. B. Bullock, *A History of Training for the Ministry* (St Leonards-on-Sea, 1955) pp. 47-8.

<sup>3</sup> Borthwick Institute, University of York (hereafter BI), Ord.P. 1819, Deacon, William Taylor.

<sup>4</sup> BI. Ord.P. 1838, Deacon, Thomas Poole.

<sup>5</sup> In all likelihood a reference to *De veritate religionis Christianae*, first published in Latin in 1627. Although available in an English translation from 1686, the Latin version remained the version of the educated man. Other works of Grotius were also recommended to ordinands. For instance, under Shute Barrington, whilst bishop of Llandaff, students (who were acknowledged in all likelihood to be non-graduate) were recommended to use Grotius' commentaries on the Old and New Testaments: see Henry Owen, *Directions for Young Students in Divinity, with regard to those attainments which are necessary to qualify them for Holy Orders*, 7th edn. (London, 1819), pp. 33, 36, 41.



mark – they were given a second chance if they crammed for examination in these same institutions. Obviously the archbishop's concern about the quality of clerical recruits was an active one.

## HOW LITERATE CANDIDATES PREPARED FOR HOLY ORDERS

York diocese had, for a great period, relied heavily on 'literate', non-graduate, clergymen, and these obtained their ministerial preparation in a number of ways, with varying degrees of formalisation and at varying expense. Some embarked on the only formally recognised ordination courses available at this time for non-graduates. St Bees (founded 1816) and St David's Lampeter (which opened March 1827) were institutions founded by the bishops of Chester and St David's respectively, each trying to tackle the problem of low graduate recruitment to their own dioceses, but whose colleges produced men who were successful in gaining employment outside their diocese.<sup>6</sup> In the period 1800-1849 at least eighty men were ordained in York diocese after a period spent at St Bees,<sup>7</sup> and four after a spell at St David's Lampeter.<sup>8</sup> From 1833 Durham University offered a Licence in Theology which a non-graduate could take in two years,<sup>9</sup> and King's College London offered a course of general education, including divinity, known as the Associateship of King's College, which also produced men suitable for ordination but with no actual degree.<sup>10</sup> These latter

<sup>6</sup> Bishop Thomas Burgess, bishop of St David's, founded a society in 1804 with the aim of building a college to educate men for the ministry, but his plans did not reach fruition until March 1827, Bullock, *A History of Training for the Ministry*, p. 29.

<sup>7</sup> Sixty-seven successful candidates for deacon had spent time at St Bees, another three almost certainly had but do not mention it in their papers. Three unsuccessful candidates had studied there. In addition there were four candidates for priest's orders who had studied there (men who had not previously taken deacon's orders in the diocese) and three men ordained on letters dimissory from Ripon diocese. See Sara Slinn, *York Clergy Ordinations, 1800-1849* (York, 2001) [hereafter *YCO, 1800-1849*] for details. A number of men appear in the York ordination records who do not feature in *The St Bees College Calendar for the Year 1851* (London, 1851), which claims to give a retrospective list of former students. Initially a residence of only one year had been required at St Bees. This was increased to two years in about 1825. The increasing acceptance of St Bees as an adequate form of preparation for orders in York diocese is indicated by the change from a practice in which the Principal was the first signatory on standard letters testimonial, to a form of official college testimonial, similar to those issued by the university colleges: see BI Ord.P. 1828, Deacon, David Jones.

<sup>8</sup> Fours ordinands presented themselves for orders in York diocese having prepared at the Lampeter college. At least three ordinands had studied at one of the Welsh grammar schools licensed for the preparation of ordinands before the opening of St David's College. For details of these schools see David A. Dowland, *Nineteenth-Century Anglican Theological Training: The Redbrick Challenge* (Oxford, 1997), pp. 12-13.

<sup>9</sup> Established 1833. The first examinations for the Licence were held in 1834, Bullock, *A History of Training for the Ministry*, pp. 62-3.

<sup>10</sup> The Associateship of King's College London was instituted 1834. Bullock, *A History of Training for the Ministry*, p. 62.

two institutions made only a minor contribution to the preparation of literate York candidates. Only one literate candidate for deacon offered himself with a Durham Licence in Theology in the period 1800-1849, but another twelve men offered themselves for deacon with Durham degrees, many of whom also mentioned holding the Licence.<sup>11</sup> Only one non-graduate presented himself as an Associate of King's College London; there were no London graduates amongst the York candidates. By the 1840s there were other places offering literate training, St Aidan's Birkenhead, a private enterprise founded in 1846, and Queen's College Birmingham, whose second charter was granted in 1847, but no York candidates offered themselves with qualifications from these institutions.

Far more men were prepared by more time-honoured methods—by clerical family members and at grammar schools. Many ordinands mention the assistance of their fathers, others their uncles, brothers and brothers-in-law. It seems very likely that a closer examination of kinship would reveal a great many more candidates spending time preparing with family members who did not share the same surname. Some of these fathers had also been their sons' schoolmasters, so it would seem that some ordinands had been completely educated by their fathers. The church was still very much a family profession and the way was smoothest for those with clerical fathers, uncles and brothers who could not only provide some training but also that very important first title for orders, a curacy, in one of their own benefices.

Grammar schools had a long history of providing affordable, tertiary education for men who wished to take orders without the expense of a university education. Indeed the Elland Clerical Society, founded in 1777 to assist evangelical, would-be ordinands who could not afford the expense of a suitable education, placed some of their pensioners in grammar schools, not only in preparation for university, but also, on occasions, directly to prepare them for ordination. For instance George Ireland, who was ordained deacon in 1815, had been supported at Leeds Grammar School by the Elland Society prior to his taking orders.<sup>12</sup> The Society also supported men under the supervision of Thomas Rogers while he was headmaster of the grammar school at Wakefield. A number of other northern grammar schools had a reputation for preparing candidates for orders.<sup>13</sup> Some men, having been successful scholars, prepared themselves for orders while employed as ushers and schoolmasters, often mentioning the assistance of the headmaster. Perhaps such

<sup>11</sup> Only one literate ordinand for deacon presented himself as holding a Durham Lic. Theo., although two other Durham students were ordained deacon without, or before, taking a BA. Many of the Durham graduates presenting themselves for Orders also mentioned that they held a Lic. Theo., Slinn, *YCO 1800-1849*.

<sup>12</sup> West Yorkshire Archaeological Society [hereafter WYAS]: Wakefield, C81/1 p. 17; C84/1 App 3, p. 43.

<sup>13</sup> Carlisle's description of St Bees Grammar School reported that boys continued in the school until they could be admitted to University or were of an age to enter Holy Orders, illustrating the important role grammar schools had in providing ordination candidates in the early nineteenth century. Nicholas Carlisle, *A Concise Description of the Endowed Grammar Schools in England and Wales* (London, 1818), p. 663.



support was assumed to be part of the payment of an usher, and it seems likely that such reciprocal arrangements were very common. Sixty-nine of the candidates between 1800-1849 mention employment as ushers and school assistants prior to ordination. John Oxlee made a good impression on his employer, Dr Vicesimus Knox of Tunbridge Grammar School, who gave him a title as his own curate, but Oxlee was unable to be ordained on it due to the bishop of Rochester's prohibition on the ordination of non-graduates.<sup>14</sup> The diocese of Rochester, with its high average benefice income and generous stipends for curates, could afford to be choosy.<sup>15</sup>

Other candidates, especially in the first two decades of the century, seem to have been almost completely self-taught, perhaps mentioning books loaned by neighbouring clergymen, but seeming otherwise to have followed no systematic course of preparation. Many men combined two or more of these modes of preparation in what could be a very protracted period of study. Samuel Barker, for instance, began his tertiary education by entering Trinity Hall, Cambridge, but his hopes of entering the church by the standard progression from college to ordination were dashed by the pecuniary problems of his family. Leaving Cambridge he took employment as an usher at a boarding school, then for the 1½ years prior to his ordination he lived with his father and studied for ordination.<sup>16</sup> Francis Gaunt had considerable experience as a teacher before he was finally ordained. Having had a commercial education in Ireland he had been a teacher since the age of seventeen. However at the age of twenty four he decided to remedy the defects in his classical education and engaged himself as an assistant in the academy of Rev. Robert Bowness, vicar of Bramham. It took him some time to master the necessary classical attainments since he says, 'I have applied myself for the last seven years to the study of the Latin and Greek languages'. His employer and teacher obviously thought well enough of his fitness for ordination since he also provided Gaunt with a title for orders, of the curacy of Bramham.<sup>17</sup> John van Hemert, who was ordained in August 1816, made a living by teaching at a school in Cockermouth. However, he made time to visit the Rev. Mr Savell for an hour every day in order to study. He then spent one and a half years studying with Mr Wilson of St Bees (although this was before the foundation of the Clerical Institution it shows the significance of St Bees Grammar School in preparing ordination candidates), before finally spending six months with Rev. Mr Wilson of Broughton in Craven, brother of the above.<sup>18</sup>

<sup>14</sup> BI Ord.P. 1805, Deacon, John Oxlee.

<sup>15</sup> Slinn, *YAJ* 80, p. 177.

<sup>16</sup> BI Ord.P. 1803, Deacon, Samuel Barker.

<sup>17</sup> BI Ord.P. 1800, Deacon, Francis Gaunt.

<sup>18</sup> BI Ord.P. 1816, Deacon, John van Hemert.

## THE TUTOR FOR ORDERS, CLERICAL SEMINARIES AND INSTITUTIONS

What are particularly interesting are those men, like van Hemert, who entered into formal arrangements with clergymen to whom they were not related, in order to gain preparation for the ministry. It was fairly common for the clergy to take pupils into their houses—this was an important means of supplementing benefice income. The pupils might be boys, or young gentlemen preparing for university, or perhaps those preparing for orders between graduation and ordination. What are significant here are clergymen who were offering assistance not in preparing for university but in preparing for ordination, by-passing university. This gives a rare opportunity to examine in detail the rather shadowy role of the 'tutors for orders', and independent clerical seminaries operating for literate candidates – an area of clerical training which, although undoubtedly very significant, has left few records. The ordination records for York diocese 1800-1849 give details of almost sixty individual clergymen who had afforded ordinands such assistance. Some of them did so on a small scale. Some are mentioned just once in candidates' ordination papers, although they seem likely to have taught more men.<sup>19</sup> And although most of the tutors were Yorkshire clergymen, there are many examples of tutors operating in other areas of the country who took on men intending ordination as literates.<sup>20</sup> Other tutors participated in a fairly well-developed network of clerical education, offering their services not just directly to individual, would-be clergy, but also taking pupils referred by and paid for by clerical societies and missionary societies. In particular, in the West Riding of Yorkshire, we can see that a number of clergymen provided tuition for the protégés of the Church Missionary Society (CMS) and the Elland Clerical Education Society.

<sup>19</sup> Isaac Altham (BI Ord.P. 1830, Deacon) studied under William Bishop of Thornton who he says was 'accredited by your Grace as tutor for candidates for Orders'. Bishop was also a signatory to James Horsfall's testimonial in 1831, which was also signed by John Barber of Wilsden. Thomas Westmorland prepared Robert Taylor for Orders in 1828 (Ord.P. 1828, Deacon, Robert Taylor), Mr Ellis of Doncaster was said to be 'long in the habit of preparing men for the Church' (BI Ord.P. 1826, Deacon, John Paine). Thomas Jessop, curate of Lowthorpe, trained William Battersby for ordination in 1835, although he was noted as not being an approved tutor (Ord.P. 1835, Deacon, William Battersby).

<sup>20</sup> For instance, John Hall (BI Ord.P. 1811, Deacon) had spent some time studying with Rev Mr Goode at Blackfriars. This is William Goode (1762-1816) who had been William Romaine's curate, and successor as rector of St Anne's, Blackfriars, London: Donald M. Lewis, *Dictionary of Evangelical Biography*, (Massachusetts, 2004): William Goode. William Bishop was assisted by Rev. Mortimer of Madeley, Shropshire, another Evangelical stronghold (BI Ord.P. 1819, Deacon, William Bishop). In the earlier period many tutors are not named, merely being described by their benefice, for instance, 'a clergyman near Chester'.



## TRAINING PROBATIONER MISSIONARIES FOR ORDERS IN YORKSHIRE

The first CMS probationer missionaries had been prepared by Thomas Scott of Aston Sandford, Buckinghamshire.<sup>21</sup> The society had some difficulty finding a replacement for Scott, but offers of help were received from John Buckworth, the energetic vicar of Dewsbury and founder of the CMS's first town association, and Thomas Rogers of Wakefield.<sup>22</sup> Dealing with the probationers was something of a team effort. At Dewsbury, Buckworth dealt with Divinity and basic education; while Edward Parkin, curate of Slaithwaite, taught advanced Classics.<sup>23</sup> As far as we know, Thomas Rogers took only one CMS student; his more significant contribution to clerical education will be discussed below.<sup>24</sup> Buckworth's *Memoir* tells us that he devoted two evenings a week to the instruction of 'such as he deemed proper for the sacred office'. This instruction embraced 'the rudiments of Latin and Greek languages, themes on theological subjects and religious advice, both of an experimental and practical nature'.<sup>25</sup> Many, but not all, of Buckworth's pupils were

<sup>21</sup> Thomas Scott himself was ordained as a literate. After school he had continued to study Latin and Greek, and after ordination learnt Hebrew. Although he entered Cambridge as a ten-year man he did not take a degree. Lewis, *Dict. of Evang. Biog.* Thomas Scott. Despite his lack of university education he was able to teach the probationer missionaries not only Latin, Greek and Hebrew but also the Arabic of the Koran. The York ordinand Thomas Norton had studied with Scott before ordination in 1813 (BI Ord.P. 1813, Deacon). Benjamin Bailey and Thomas Dawson had begun their training with Scott before moving to study with John Buckworth. Norton went to India with CMS in 1815, Benjamin Bailey and Thomas Dawson in 1816: Stuart Piggin, *Making Evangelical Missionaries, 1789-1858: the social background, motives and training of British protestant missionaries to India* (Oxford, 1984), p. 267.

<sup>22</sup> Eugene Stock, *The History of the Church Missionary Society, its environment, its men and its work*, 3 vols (London, 1899), vol.1 p. 90.

<sup>23</sup> York Ordinands Robert Beaumont, James Appleyard and Isaac Clarkson all mention Parkin's assistance. Joseph Bailey does not mention Parkin's assistance, but the CMS records show the connection, Lewis, *Dict. of Evang. Biog.* Joseph Bailey. Henry Baker was another CMS probationer placed with Parkin, but not ordained in York. He went to India in 1817: Piggin, *Making Evangelical Missionaries*, p. 268.

<sup>24</sup> Henry Baker, who was not ordained in York diocese: Piggin, *Making Evangelical Missionaries*, p. 268.

<sup>25</sup> Isaac Clarkson, *Memoir of the Revd John Buckworth, late vicar of Dewsbury* (London, 1836), p. 49-50.

destined for the mission field, but some remained in England.<sup>26</sup> His *Memoir* would lead us to believe that his contribution in this field was well known: 'he was the honoured instrument of introducing several pious young men into the ministry, and his advice upon this important subject was frequently sought, even by strangers from distant parts of the kingdom.'<sup>27</sup>

This CMS training activity in Yorkshire was relatively short lived; Edward Parkin's contribution stopped in 1818 when he was appointed second master of Bradford Grammar School, a place where the governors were reluctant to allow the masters distractions from the school.<sup>28</sup> Buckworth experienced considerable ill health in the latter part of his time at Dewsbury, frequently leaving the parish in search of better air, which meant that he became less able to give time to pupils. It was probably this, and the fact that from January 1825 the CMS had sorted out its training of non-graduate probationer missionaries with the opening of their Institution in Islington, that led this training activity to stop. As an interesting postscript to Edward Parkin's activities as a tutor for orders, after only a brief period at Bradford Grammar School, he went to Upper Canada with the Society for the Propagation of the Gospel. There

<sup>26</sup> Pupils destined for the mission field included the Bailey brothers, Benjamin and Joseph, Thomas Dawson, William Greenwood, and John Adlington (BI Ord.P. 1815, Deacon, Benjamin Bailey; Ord.P. 1820, Deacon, James Bailey; Ord.P. 1815, Deacon, Thomas Dawson. Greenwood and Adlington were not York ordinands. Adlington was an orphan raised by Buckworth's friend Daniel Corrie. Clarkson, *Memoir of John Buckworth*, pp. 49-50. Piggin, *Making Evangelical Missionaries*, pp. 267-8. The pupils who remained in England were James Appleyard who was ordained in 1819 and became Buckworth's curate (BI Ord.P. 1819, Deacon, James Appleyard), Isaac Clarkson (BI Ord.P. 1818, Deacon), and Robert Beaumont (BI Ord.P. 1818, Deacon). Significantly, although these men are named as pupils in the *Memoir of Buckworth*, p. 51, written by ex-pupil Clarkson, they do not identify Buckworth as their primary tutor when applying for orders. Appleyard mentions Edward Parkin as his main tutor, Beaumont names Edward Parkin and William Heald, vicar of Birstall, Clarkson names Henry Bailey, headmaster of Drighlington Grammar School and Edward Parkin. *The Annals of Almondbury* mention that Buckworth had a body of young men being trained for the Church, and numbers Bishop Corrie of Madras amongst them. This is an error – Buckworth and Corrie were friends from youth, Buckworth being credited with introducing Corrie to pious friends. Charles Augustus Hulbert, *Annals of the Parish Church of Almondbury* (London, 1882), p. 78. Clarkson, *Memoir of John Buckworth*, p. 24.

<sup>27</sup> Clarkson, *Memoir of John Buckworth*, p. 49.

<sup>28</sup> See, BI. Ord.P. 1818, Deacon, Robert Beaumont; Ord.P. 1819, Deacon, James Appleyard; W. Claridge, *Origin and History of Bradford Grammar School* (Bradford, 1882), p. 44.



he was said to have a penchant for education, 'both religious and general'. In Canada he built schools and by 1827 was preparing two men for Holy Orders and preparing the basis for a Canadian Anglican theological seminary.<sup>29</sup>

Before leaving the CMS and its connection to Yorkshire clerical education, it is worth mentioning that the Society's activities have resulted in some slightly misleading ordination records. At this period the bishops did not ordain on foreign titles, so CMS missionaries were ordained on sham titles provided by clergy in sympathy with the Society's aims. This means that some York ordinands, apparently being recruited into the diocese, had no intention of staying, and we must suspect that those clergy who provided their titles, did not require the assistance for which they had asked.<sup>30</sup>

### THE ELLAND CLERICAL EDUCATION SOCIETY AS A CUSTOMER OF TUTORS FOR ORDERS

This hub of activity in Yorkshire was a direct result of the enthusiasm of John Buckworth for the aims of the CMS. However, Buckworth was also a member of the Elland Clerical Society, whose Clerical Education Society was another big customer of the tutors for orders. The Clerical Education Society, founded in 1777, had a simple *modus operandi*. The Society looked out for 'serious' Evangelical young men, paid for their education, provided them with a suitable title for orders, generally under an incumbent with proven Evangelical sensibilities, oversaw their early careers, and then recruited them back as members or financial supporters of the Society. This proved a very successful means of propagating Evangelical churchmanship throughout large parts of Yorkshire and beyond. The Society had high profile support in Evangelical spheres. William Wilberforce, writing to William Hey in 1789, asked about the state of funds in your 'West Riding Charity for catching the colts running wild on the Halifax Moor, cutting their manes and tails, and sending them to college.'<sup>31</sup> It is worth noting that this is a slightly misleading view of how the Society operated. The Society recruited from much further afield than the wilds of the West Riding, and the financial constraints that it operated under meant that there were periods during which university was not on offer to the students.

<sup>29</sup> Parkin's mental health suffered in Canada. He suffered a number of family griefs and professional disappointments and the running of the seminary was given to Oxford graduate Joseph Braithwaite by bishop Stewart. By 1830 the bishop was reporting that Parkin was deranged. Parkin left his family in 1833 looking for work or a pension in England. He spent time in Wiltshire as a curate, writing proposals about pacifying the Canadian colony and recommending the foundation of an inter-denominational college. He died in a mental asylum. *Dictionary of Canadian Biography* (Toronto, 1966), vol. VII (1836-1850), pp. 681-83.

<sup>30</sup> Thomas Dawson was ordained to the title of Wetherby, Benjamin Bailey to Harewood and Joseph Bailey to St Sampson's, York. From 1818 CMS students could be ordained on their overseas titles without the need for one in England or Wales.

<sup>31</sup> Robert Isaac Wilberforce and Samuel Wilberforce, *The Life of William Wilberforce*, 5 vols (London, 1838), vol. 1, p. 252.

The influence of the Elland Clerical Society was slightly shadowy, which does pose some problems when examining the influence they had over the operation of tutors for orders and clerical seminaries in the diocese of York. It is significant that the men who owed their education and situations to the Society were often rather reticent about their connections. When applying for ordination, Elland-supported students did not mention the source of funding for their studies, how they had been provided with a title, or their obligations to the Society after ordination. And the Society was discrete about the identities of its students in its public reports.<sup>32</sup> It was clear to many that these connections would not necessarily endear them to others. A connection with the Elland Society would reveal a man as an Evangelical— perhaps worse, as a Calvinist. It would have been tantamount to admitting that he was of sub-gentlemanly status— a man whose family could not afford to send him to University. In the first half of the nineteenth century this sub-gentlemanly status would still, in the minds of many, put a man outside the professional pale. This being so, it is necessary to compare the York ordination papers with the records of the Elland Society to get a true picture of how the funds of the Elland Society were being spent on tutors for orders.

A number of tutors for orders were members of the Elland Society, and a number of them were in the Society's debt for opening their own way into the Church. Two of the Society's earliest students, Samuel Knight and Thomas Rogers, were utilized by the Society for almost the whole of their professional lives as tutors, Knight eventually becoming the Society's treasurer. Knight and Rogers had similar backgrounds. Both had been able pupils in West Riding grammar schools, but had fathers who could not afford a University education for them. Rogers' father was a poor curate.<sup>33</sup> Knight was the son of ex-collier and dissenting preacher, Titus Knight, sometime itinerant for Lady Huntingdon. Samuel had caught the eye of George Burnett, founder of the Elland Clerical Education Society, who, we might imagine, liked the idea of bringing the son of a dissenting minister back into the Anglican fold.<sup>34</sup>

<sup>32</sup> The Elland Society was not the only group with this kind of programme manipulating the pool of potential ordinands. There were similar societies at Bristol (founded 1795), Creton (founded 1812) and London (1813). They were each in contact with one another and it seems that the networks of recommendation and tuition were interlinked. All were discrete about the identities of students.

<sup>33</sup> Charles Rogers, *Memoir of Thomas Rogers*, AM, (London, 1832), pp. 3, 8.

<sup>34</sup> John A Vickers, *A Dictionary of Methodism in Britain and Ireland*, (Peterborough, 2000), pp. 194-5; J. Knight, *Sermons and Miscellaneous Works: arranged and revised by J Knight: to which is prefixed a memoir by W. Knight*, 2 vols (Halifax, 1828), pp. xxii-xxiv.



The Elland Society sent both men to Magdalene College, Cambridge, which at the time offered a haven to Evangelicals under the president, Samuel Hey.<sup>35</sup> Rogers gained his BA in 1783 and was ordained deacon by the bishop of Lincoln shortly afterwards. His *Memoir* gives an indication of the opposition that known Evangelicals could face on ordination, noting that a friend of Rogers had been subjected 'to unprecedented severity of examination'. However, all turned out well for Rogers, since the severe examining chaplain, 'Dr—' died just before Rogers' own examination, and he was then congratulated publicly by the bishop on the excellence of his performance. Perhaps the thrill of this moment was one of the motivations behind his own involvement with clerical education.<sup>36</sup> Samuel Knight was also ordained to Lincoln diocese in 1783. Both were found curacies under Evangelical oversight, Knight under the elderly Thomas Adam of Winteringham in Lincolnshire.<sup>37</sup> Rogers held a succession of short-term curacies before settling for a period with Thomas Robinson, incumbent of St Mary's, Leicester and leading-light among the Midland Evangelicals.<sup>38</sup>

From the very beginning of his clerical life Rogers started to supplement his income by receiving pupils into his house.<sup>39</sup> During his period at Leicester he opened a school in The Newarke which offered Latin, Greek, arithmetic, surveying and geography.<sup>40</sup> But he also took adult pupils, sent to him by the Elland Society, including John Ison, an ex-stocking manufacturer from Leicester, who lived with Rogers' family for three and a half years.<sup>41</sup> After Rogers left Leicester in 1795, Ison completed his

<sup>35</sup> P. Searby, *A History of the University of Cambridge* (Cambridge, 1997), pp. 320, 322.

<sup>36</sup> Rogers, *Memoir of Thomas Rogers*, pp. 17-18. Thomas Rogers (CCEd Person ID 19639); The Clergy of the Church of England Database 1540-1835, <<http://www.theclergydatabase.org.uk>>, accessed 6 December 2008.

<sup>37</sup> Samuel Knight was ordained priest only three months after deacon due to Adam's incapacity. Samuel Knight (CCEd Person ID 69126)', The Clergy of the Church of England Database 1540-1835, <<http://www.theclergydatabase.org.uk>>, accessed 6 December 2008; Knight, *Sermons and Miscellaneous Works*, p. xxiii.

<sup>38</sup> Curate of Norton cum Galby, licensed 17 June 1783, curate of Ravenstone, Derbys., licensed 5 July 1791. He was then curate of Kirkthorpe near Wakefield for a few months. Thomas Rogers (CCEd Person ID 19639)', Rogers, *Memoir of Thomas Rogers*, pp. 26, 49. It is not certain if Thomas Rogers' first curacy of Norton cum Galby, Leics., could really be said to be under an approved evangelical incumbent. The vicar, William Ludlam, had contacts in Evangelical circles, but published sermons critical of Joseph Milner in the year of his death, 1788. However, Ludlam was non-resident and Norton was close to Leicester and the support of Thomas Robinson, so the curacy may have been the best available to this Ellander at this point.

<sup>39</sup> Rogers, *Memoir of Thomas Rogers*, p. 26.

<sup>40</sup> Brian Simon, *Education in Leicester, 1540-1940: a regional study* (Leicester, 1968), p. 112.

<sup>41</sup> In August 1795 Rogers reported on Elland students Pigot, Wilmot and Abbott, WYAS: Wakefield C84/1, August 1795.

preparation with Samuel Knight at Winteringham, Rogers' fellow collegian and Ellander.<sup>42</sup> Ison's case illustrated a number of significant characteristics of the Elland Society's methods. First, Ison's ordination papers are clear about the tutors who educated him, but not about who funded his education. Secondly, it shows that men preparing for orders were often sent between different tutors depending on the personal circumstances of the tutor and the needs of the student. Thirdly, it demonstrates that the networks of ordination tuition were wide—the Elland Society operated nationally rather than regionally.

In February 1795, Thomas Rogers was elected headmaster of Wakefield Grammar School, Yorkshire; the support of Thomas Robinson, an ex-Wakefield Grammar pupil, was undoubtedly significant. Rogers' *Memoir* notes that 'the stipend was not liberal but offered considerable facilities for an independent living by taking pupils'.<sup>43</sup> He was also allowed by the governors to hold the lectureship of St John's, Wakefield. It seems he was a gifted communicator, his lectures were well attended, even by nonconformists; and with the prospect of a forthcoming confirmation he was asked to catechize the confirmands of the parish, the vicar being infirm and the curate considered too young. The success of these classes led to the founding of an evening lectureship in the parish church which he held until his death in 1832.<sup>44</sup>

In his early years as headmaster his activities as a clerical educator were almost in abeyance. Then in 1811 he applied for, and received, permission to enlarge the headmaster's house.<sup>45</sup> From this point, his work as a tutor for orders for literate men began in earnest. Perhaps not surprisingly, Rogers' health suffered under the strain of his heavy workload and in April 1814 he resigned the school on health grounds. The governors, however, allowed him to continue residing in the headmaster's house, and his clerical education became his main form of support. We can name twenty York ordinands who seem to have been prepared for ordination by Rogers at

<sup>42</sup> Ison was ordained for York diocese in Dec. 1799 (BI Ord.P. 1799, Deacon: John Ison); WYAS: Wakefield, C84/1, p. 43 (Appendix pt 3rd), under 1795. Ison was subsequently sent to St Edmund Hall, Oxford, by the Elland Society, before his ordination.

<sup>43</sup> Rogers, *Memoir of Thomas Rogers*, pp. 49-50.

<sup>44</sup> Rogers, *Memoir of Thomas Rogers*, pp. 66-7; J.W. Walker, *Wakefield, its History and People* (Halifax, 1939), p. 293; BI Nom.L. 1801/2; Inst.AB.17, p. 117.

<sup>45</sup> Matthew Henry Peacock, *History of the Free Grammar School of Queen Elizabeth at Wakefield* (Wakefield, 1892), p. 28.



Wakefield.<sup>46</sup> In addition to this there are a couple of men who were not successful in being ordained,<sup>47</sup> and some who were apparently ordained outside the diocese. About a quarter of his pupils were sent to him by the Elland Society,<sup>48</sup> one was paid for by the CMS and one at least was recommended to Rogers by archbishop Harcourt.<sup>49</sup> Rogers' pre-ordination work was approved by the archbishop to the extent that he was appointed one of the approved tutors for orders following Harcourt's regulation of 1827. To give some idea of the significance of his work at this period, in 1827, at the December ordination, 38 per cent of the deacons had prepared with him.

The York records, however, seem to indicate only a fraction of Rogers' total activity. The author of the *History of Wakefield Grammar School* believed that he had prepared over 50 men for the Church, noting that 'his work in this respect is spoken of in high praise'.<sup>50</sup> His son and biographer commented,

a very considerable proportion of his time and attention was, for many years, devoted to the preparation of young men for the ministry without going to

<sup>46</sup> The ordination papers of the following men confirm the role of Rogers: John Richards (BI Ord.P. 1812, Deacon); John Howarth (BI Ord.P. 1812, Deacon); John Pearson (BI Ord.P. 1813, Deacon); Richard Paver (BI Ord.P. 1816, Deacon); William Cann (BI Ord.P. 1816, Deacon); William Howard (BI Ord.P. 1817, Deacon); Samuel John Hilliard (BI Ord.P. 1819, Deacon); Theophilus Morgan (BI Ord.P. 1827, Deacon); George Marmaduke Hodgson (BI Ord.P. 1827, Deacon); George Scholfield (BI Ord.P. 1827, Deacon); Henry Cooper (BI Ord.P. 1827, Deacon); Joseph Twentyman (BI Ord.P. 1827, Deacon); William Gill (BI Ord.P. 1829, Deacon); James Bardsley (BI Ord.P. 1833, Deacon). From the evidence of testimonials and *si quis*, the following men seem very likely to have been taught by him: William Solomon Horner (BI Ord.P. 1827, Deacon); George Barker Blackley (BI Ord.P. 1827, Deacon). The initial stages of his preparation had been with James Knight, funded by the Elland Society; Thomas Rowbottom (BI Ord.P. 1828, Deacon); John Wilson (BI Ord.P. 1828, Deacon); Edward Thompson (BI Ord.P. 1830, Deacon). The involvement of Rogers in James Dransfield's tuition is given in Charles Augustus Hulbert, *Annals of the Church in Slaithwaite ... from 1593 to 1864 ... With a continuation and notes* (London, 1864), pp. 166-67.

<sup>47</sup> William Cope was recommended to the Elland Society by Rogers in July 1818. He withdrew later that year having developed consumption (WYAS: Wakefield, C84/1 July 1818, C84/4 Dec. 1818). Joseph Chapel was a pupil of Rogers who the Elland Society declined to support (WYAS: Wakefield C84/1 1826; BI Ord.P. 1826, unsuccessful candidate).

<sup>48</sup> In 1811 and 1812 the Elland Society was paying Rogers for board, lodging and tuition of John Richards (BI Ord.P. 1812, Deacon); John Howarth (BI Ord.P. 1812, Deacon), and Mardin (not ordained in York). In 1813 they were paying for Coldwell and Kettlewell. In 1827 J. B. Clifford was sent by the Society to Rogers to prepare for university (WYAS: Wakefield, C84/4, Nov. 1811, Feb. & July 1812, June, Oct. & Dec. 1813; Dec. 1814, Apr. 1829).

<sup>49</sup> The CMS student was Henry Baker who was not a York ordinand. Stock describes Baker as 'the first candidate to be sent' to Rogers, but it is not clear if there were any others, Stock, *The History of the Church Missionary Society*, vol.1 p. 90. Harcourt recommended that William Gill should study with Rogers for two years, see William Gill, *Memoir of the Late William Gill edited by Rev Alfred Gatty* (Sheffield, 1880), p. 4.

<sup>50</sup> Peacock, *Wakefield Grammar School*, p. 146.



University. Though it would not be desirable that the necessity of a University education should be generally dispensed with; yet if some latitude had not been allowed it would perhaps have been impossible, at that period, to have supplied the church with a competent number of well-educated ministers, the expense of a college preparation would have excluded from the pastoral office many who are now both an ornament and a blessing to the established church.<sup>51</sup>

Like Rogers, Samuel Knight also began taking in pupils from his first curacy. In Winteringham, residing at the rectory, he was 'head of a considerable establishment'. Most of the pupils were boys and young men preparing for University,<sup>52</sup> although, as with Rogers, the Elland Society did prevail upon him to take their pupils. We have already met with John Ison, who was sent to Knight after leaving Thomas Rogers. The Elland Society records suggest there were at least another five Ellanders sent to him in the 1790s.<sup>53</sup> George Henderick, a Cambridge schoolmaster unable to afford university, was sent to study with Knight, 'a Gentleman of distinguished eminence', by Charles Simeon.<sup>54</sup> Knight was well known in Evangelical circles: as a member of the Rauceby Clerical Association, he was present when the founding of the CMS was envisaged, and he was a correspondent of the societies at Elland, Hotham and London.<sup>55</sup> Through the Hotham Society he knew James Stillingfleet of Hotham, William Richardson of York, and Joseph Milner of Hull.<sup>56</sup> When Henry Coulthurst, vicar of Halifax, achieved his aim to build a new church, Holy Trinity, for his huge parish, it was Samuel Knight he chose as the first incumbent in 1798. Whatever the other benefits of a move back to Halifax, becoming incumbent of Holy Trinity was not to the financial advantage of the Knight family, and Samuel continued to take pupils,

To a certain extent this employment was pleasant to him; but he was unable to assign to it that limit which expediency and inclination would have dictated; hence being combined with other necessary pursuits ... it often became irksome, and not unfrequently oppressive and painful to him.<sup>57</sup>

During this period he had a school teaching classics and maths to boys and girls,<sup>58</sup> as

<sup>51</sup> Rogers, *Memoir of Thomas Rogers*, p. 55-6.

<sup>52</sup> Knight, *Sermons and Miscellaneous Works*, p. xxxv-xxxvi.

<sup>53</sup> In 1795 Knight reported to the Society on students Barrs, Nankivell, and Deverell (WYAS: Wakefield, C84/1, August 1795). Deverell's younger brother seems also to have been sent to Knight (C84/1 Aug. 1797, Apr. 1798). Robert Adam was sent to him in 1796 (C84/1 Oct. 1795). Lawrence Elliott was also to be sent to Knight (C84/1 Oct. 1797).

<sup>54</sup> Henderick was ordained deacon for York diocese, (BI Ord.P. 1797, Deacon: George Henderick).

<sup>55</sup> William Carus, *Memoir of the Life of Charles Simeon* (New York, 1847), p. 64.

<sup>56</sup> Knight, *Sermons and Miscellaneous Works*, p. xxxvii.

<sup>57</sup> Knight, *Sermons and Miscellaneous Works*, p. xlv.

<sup>58</sup> Anne Lister attended his school, 1806 and 1809, when she was between 15 and 18 years old. During 1812 and 1813 Knight was still assisting her with Greek and arithmetic. Transcribed extracts for her diaries for this period are available at Herstory to History, <<http://www.historytoherstory.org.uk/>>, accessed 12 October 2008. Letters between Anne Lister and Samuel Knight are at WYAS: Calderdale, SH:7/ML/49, 66, 105, 118, 202.



well as a few adult ordinands, the majority of whom were funded by the Elland Society.<sup>59</sup>

Given how irksome he found his teaching, it is unsurprising that, after being preferred to the vicarage of Halifax at the end of 1817, Samuel Knight ceased this kind of work. But the baton was almost immediately taken up by his second son, James. And although Samuel had died before Harcourt's regulation appointing authorised clerical tutors, his son James was approved by the archbishop as a tutor. In 1817, James received his MA from Lincoln College, Oxford, but was disappointed in a fellowship, allegedly on account of his Methodist connections.<sup>60</sup> He spent time as his father's curate until 1824 when he became perpetual curate of St Paul's, Sheffield.<sup>61</sup> At Halifax he prepared at least three men for orders.<sup>62</sup> At Sheffield he had at least five more.<sup>63</sup>

<sup>59</sup> The Elland Society agreed to send Robert Humphrey to Knight in 1800, (BI Ord.P. 1805, Deacon: Robert Humphrey; WYAS: Wakefield, C84/1 July 1800). In 1804 they agreed that John Campbell and Richard Kenny should study with him (C84/1 July 1804). They also had arranged for Henry Kirke White to study with Knight, although by the time of their decision, White had already arranged tuition for himself with Lorenzo Grainger, Knight's successor at Winteringham (C84/1 Apr. 1804). In 1805 William Sharp was admitted to the Society and intended to go to Knight (WYAS: Wakefield C84/1 July 1805). Preston Nunn was supported by the Elland Society with Knight in 1814. (BI Ord.P. 1815, Deacon: Preston Nunn). Mr Powell was also with Knight in 1818. Of these only Nunn and Humphrey were York ordinands. The Elland records often note that men are said to be going to Knight 'if accommodation can be found'. Henry Heap, protégé of John Crosse, vicar of Bradford, seems to be the only pupil of Samuel Knight who was not supported by the Elland Society, Abraham Holroyd, *Collectanea Bradfordiana* (Saltaire, 1873), p. 167.

<sup>60</sup> James Knight (CCed Person ID 41493)', The Clergy of the Church of England Database 1540-1835 <<http://www.theclergydatabase.org.uk>>, accessed 6 December 2008.

<sup>61</sup> Curate of Halifax, then perpetual curate of St John in the Wilderness, Halifax (in the nomination of his father), December 1821 – May 1822, BI Inst.AB.19, p. 39, 52. In his resignation to the archbishop he explains 'having failed in my endeavour to obtain the interest of a parliamentary grant to the curacy ..., on the grounds of non-residence I am reluctantly compelled to resign', BI Res 1822/3. There seems to have been a career gap until he went to Sheffield May 1824, BI Inst.AB.19, p. 120.

<sup>62</sup> Francis Mules was the unhealthy son of a minor canon of Ely, trying 'healthy Yorkshire air'. He was ordained at York 1824 (BI Ord.P. 1824, Deacon); James Reece came to James Knight after three years with Walter Smith: for Smith see below (BI Ord.P. 1823, Deacon). Henry Stoken was sent to James by the Elland Society (BI Ord.P. 1824, Deacon).

<sup>63</sup> Edmund Richardson, pensioner of the Elland Society, (BI Ord.P. 1825, Deacon, Edmund Richardson; WYAS: Wakefield C84/1 1825); Robert Vashon Rogers, sent to Knight by the archbishop, (BI Ord.P. 1827, Deacon, Robert Vason Rogers); George Barker Blackley, supported by Elland Society, although his ordination papers do not mention this, (BI Ord.P. 1827, Deacon, George Barker Blackley; WYAS: Wakefield, C84/1 July 1825, July 1827); Francis Keeling, who was allowed by the archbishop to leave Knight to study with William Snowden at Bawtry, in order to be closer to family, (BI Ord.P. 1837, Deacon: Francis Keeling). He may also have been involved in the education of Joseph Chappell, a literate candidate for orders, in 1826 (BI Ord.P. 1826, unsuccessful, Joseph Chappell).



Like Thomas Rogers and Samuel Knight, Walter Smith had been supported at Magdalene College, Cambridge as an Elland pensioner.<sup>64</sup> He was curate of Almondbury from 1796 until his death in 1821 and master of the grammar school, 1803-1821. From the York ordination papers we know he was involved with the tuition of five men, and the Elland records show that three of these were paid for by the Elland Society.<sup>65</sup> The two other York ordinands were educated by Smith but not supported by the Elland Society.<sup>66</sup> The *Annals of Almondbury* reliably add two more names, and the letters of John George Breay, one of Smith's students, would suggest there were more.<sup>67</sup>

We might presume that, like Thomas Rogers, Smith initially started his clerical tuition to supplement his school work, and most of the advanced classical teaching of his grammar school took place at the vicarage. Indeed the clerical students seem sometimes to have taught the grammar school pupils.<sup>68</sup> Although a short-lived seminary (Walter Smith died suddenly at the age of 56 in October 1821), we know a fair amount about it because Breay was the subject of a pious biography which printed many of his letters from this time. From these it is clear that Smith's pupils lived and worked under their tutor for at least two years and Smith operated with an

<sup>64</sup> He became a pensioner in 1785 (WYAS: Wakefield C84/1 App. 3 p. 43).

<sup>65</sup> Robert Bartholomew Holmes (BI Ord.P. 1821, Deacon; WYAS: Wakefield C84/4 Jan. 1819, Dec. 1819, 1820); John Hope (BI Ord.P. 1821, Deacon; WYAS: Wakefield C84/1 app. 3, C84/4 Jan. 1819, July 1819, Dec. 1819, 1820); James Reece (BI Ord.P. 1823, WYAS C84/1 p. 44; C84/4, 1820, 1821, 1823). The Society's records show that Smith was paid to teach Mr Cook, another Ellander, in 1819, (WYAS: Wakefield C84/4 July 1918).

<sup>66</sup> John George Breay, (Ord.P. 1819, Deacon) and Robert Milne, (BI Ord.P. 1820, Deacon).

<sup>67</sup> Richard Ebenezer Leach of Holmfirth, probably the man ordained by the Bishop of Norwich, 31 March 1822, *Christian Remembrancer*, May 1822, p. 218, and Joseph Walker who went to Cambridge University. The *Annals of Almondbury* also mention Canon Hedon, son of the Bishop of Bath and Wells, and centenarian. Hulbert's informant seems to be a little confused here and probably means Beadon rather than Hedon. Bishop Beadon had one son, Richard, who does not seem to have entered the Church. The *Fasti* notes that the bishop's nephew Frederick was chancellor. This man was a centenarian, although he took orders in 1801 so is too old to be part of Smith's group. Hulbert, *Annals of Almondbury*, p. 78; J. Horn & D. Sherwin, *Fasti Ecclesiae Anglicanae, 1541-1857: V. Bath and Wells Diocese* (London, 1979); Nigel Aston, 'Beadon, Richard (1737-1824)', *Oxford Dictionary of National Biography*, Oxford University Press, 2004, [<http://www.oxforddnb.com/view/article/1796>, accessed 2 March 2008]. John George Breay's biography mentions a fellow student, Rev. W.W., who would have been at Smith's in about 1819 and another student, J.S. —, ordained 20 June 1818, John George Breay, *Memoir of the Rev. John George Breay, with a selection of his correspondence*, 4th edn, (London, 1862) pp. 41, 61.

<sup>68</sup> Taylor Dyson, *Almondbury and its Ancient School: Being the History of King James's Grammar School, Almondbury, with Incidental Chapters on the History of the District and Its Inhabitants* (Huddersfield, 1926), p. 114.



atmosphere of very earnest and personal Evangelical piety and disciplined oversight. This can be illustrated by a couple of extracts from Breay's letters home to his sisters,

about a month ago Mr Smith suggested to me that he thought it would be to our spiritual benefit to retire for prayer between tea and supper.

We asked his [Mr Smith's] permission to meet together, once a week, to pray for the success of the gospel, and a blessing on our studies. He consented, and desired that we would remember him at the throne of grace.<sup>69</sup>

Whilst living with Smith, the would-be clergy engaged in more than just personal spiritual development. They also dipped their toes in the waters of pastoral care. They attempted to convert dying parishioners—Breay reported to his family that he was concerned that some had died without him 'being able to say much in favour of a divine change having passed on their souls'.<sup>70</sup> They taught Sunday schools and also visited the workhouse—here Breay said, 'I cultivate the talent of delivering my discourses extemporaneously'.<sup>71</sup> They also practised writing sermons which they delivered to one another. And they were given indirect pulpit experience: when Breay proudly told his mother 'two sermons of mine have lately been preached in Almondbury Church', he meant that he wrote them and another clergyman delivered them.<sup>72</sup>

#### HARCOURT'S APPROVED TUTORS

At the point when Harcourt's diocesan regulation came into force in 1827, only two of the men discussed so far were still operating: James Knight and Thomas Rogers. This left a gap in the market into which stepped two other men, both of whom developed their tuition to the point at which they were described as running clerical seminaries or clerical institutions—John Barber and his Clerical Institution at Wilsden, and William Snowden with his School for Literates at Bawtry and Swillington.

John Barber, a graduate of St John's, Cambridge, had served his first curacy in Macclesfield, Cheshire, before coming to York diocese in 1827. Although now beneficed as the first perpetual curate of Wilsden, Bradford, the net income was not high—reported to be £46 in the early 1830s.<sup>73</sup> Barber advertised his enterprise. The text of the advertisement was reproduced in the American magazine *Episcopal Watchman* under the heading 'Theological Seminary', with the note, 'This may be considered the germ of a theological seminary'—we might assume the American Church looked with interest at the English Church whose provisions for clerical training were so

<sup>69</sup> Breay, *Memoir of J.G. Breay*, p. 58.

<sup>70</sup> Breay, *Memoir of J.G. Breay*, p. 59.

<sup>71</sup> Breay, *Memoir of J.G. Breay*, pp. 57, 64.

<sup>72</sup> Breay, *Memoir of J.G. Breay*, p. 61.

<sup>73</sup> *British Critic*, vol 1, no.1 (1827), p. 250; BI Inst.AB.19, pp. 295-6.

much less advanced than their own.

We observe on the cover of an English Magazine the following advertisement – "His grace the archbishop of York, has been pleased to confer on the Rev John Barber, MA, of St John's College, Cambridge, and incumbent of St Matthew's church, Wilsden, in the parish of Bradford, the privilege of educating candidates for Holy Orders, within the diocese of York, in conformity with his grace's present regulations. Mr B can accommodate two gentlemen in his house, in addition to those already with him, and comfortable lodging may be obtained in the village of Wilsden for others."<sup>74</sup>

Barber's ambitions seem to have been quite considerable. We might assume that he was hoping for at least half a dozen students at a time. His students began to present themselves for orders at York from 1831. The first ordinand describes himself as from the 'clerical establishment conducted by Rev. John Barber ... at Wilsden'; by 1833 it is 'the Clerical Institution at Wilsden'. In the period up to 1837, Barber certainly had five, and in all likelihood eleven, pupils successfully ordained as deacon to the diocese.<sup>75</sup> Not only had the archbishop approved his activities in a general way, he also kept some sort of watch over the progress of the pupils, since in a letter in Thomas Hayne's ordination papers for 1832, Hayne explains that the

<sup>74</sup> *Episcopal Watchman*, 1829, p.240.

<sup>75</sup> These students are: Thomas Hayne (BI Ord.P. 1832, Deacon); James Bardsley (BI Ord.P. 1833, Deacon), Bardsley confirms his method of education is his book of reminiscences *Personal Visits to the Graves of Eminent Men* (London, 1877), p. 233. He had also spent some time reading with Thomas Rogers at Wakefield; Frederic Birch (BI Ord.P. 1833, Deacon); Thomas Simpson (BI Ord.P. 1833, Deacon); William Marston (BI Ord.P. 1835, Deacon). The following do not explicitly state that Barber has educated them in their ordination papers but it seems likely that he did. These men are those who were living at Wilsden immediately prior to ordination (judged by their *si quis*, read in their local church the Sunday preceding) and who had Barber as a signatory to their testimonials. Most were born outside the local area so were not merely parishioners: Joseph Mitchell Burton – moved to Wilsden about two years before ordination, testimonials and *si quis* signed by Barber (BI Ord.P. 1831, Deacon); Joshua Laycock, testimonials and *si quis* signed at Wilsden (BI Ord.P. 1832, Deacon); John Henry Greenwood had made an unsuccessful application for orders in 1832. Before his successful application in 1835 he had spent time at Wilsden, where his *si quis* was signed and Barber signed his testimonials; William Hodgson – had a three year testimonial signed by Barber and *si quis* signed at Wilsden, (BI Ord.P. 1835, Deacon); William Marsden Buxton – in 1834 he had lived in Manchester, but moved to Wilsden before ordination in 1835. Barber was signatory to his testimonial (BI Ord.P. 1835, Deacon); George Richard Anstey, testimonial for 1 year 7 months signed by Barber and local incumbents, after which he went to St Alban's, Oxford (BI Ord.P. 1838, Deacon). Barber's connection with John Butterfield seems likely to have been as neighbour rather than tutor (BI Ord.P. 1833, Deacon).

<sup>76</sup> BI Ord.P. 1832, Deacon, Thomas Hayne. He left Barber to study with Charles Musgrave, vicar of Halifax.



archbishop had allowed him to leave the Institution in Wilsden, and continue reading with another tutor.<sup>76</sup> One of Barber's students was a graduate, but the rest were intending ordination as literates.<sup>77</sup> Barber's role in training ordinands was well enough known to merit a mention in William Cudworth's *Round About Bradford*, published almost 40 years later. Cudworth is able to supply the name of an additional student, Rev. T. Marsden, who was not ordained in York diocese and was serving in Chester at the time of writing.<sup>78</sup>

We can imagine that the motivation for the clerical institution at Wilsden was again financial since in 1839 Barber was preferred to the perpetual curacy of Brierley which, although it had a net income of only £130, was still worth almost three times as much as Wilsden, and the 'Clerical Institution at Wilsden' ceased.

William Snowden's institution was much longer lived, beginning shortly after Harcourt's regulation, and carrying on into the 1840s when it metamorphosed into an institution for graduates seeking pre-ordination preparation. In 1827, Snowden, the perpetual curate of Horbury, Wakefield, found himself with a sick and dwindling family—four children had died of lung disease in his nine and half years at Horbury and another two were unwell. He applied for, and received, permission for non-residence on the grounds of his family's health and they moved to Bawtry on the Yorkshire—Nottinghamshire border. We might imagine that the Institution for Literates was Snowden's idea for making a living whilst non-resident, since much of his benefice income now belonged to his Horbury curate.<sup>79</sup> Like Barber, he also advertised. The *Christian Remembrancer* for 1832 carried the following:

By a recent regulation in the diocese of York it appears that non-graduate candidates there cannot be admitted candidate for Holy Orders after they have completed their 30th year; nor without at least two years preparatory study, under the direction of some clergyman appointed for that purpose, of whom one is the Rev W. Snowden, B.D., incumbent of Horbury, Yorkshire.<sup>80</sup>

<sup>77</sup> Thomas Simpson had previously been at St Mary's Hall, Oxford. He was admitted SCL in Lent 1833. At York men of SCL status were usually categorised as graduates. Simpson was from a wealthy family. His father James was a wealthy Accrington Calico printer, and Thomas was able to serve his curacy at Slaithwaite without salary, Edward Royle, *Bishop Bickersteth's Visitation Returns for the Archdeaconry of Craven, Diocese of Ripon, 1856* (York, 2009), p. 305 (Pannal entry).

<sup>78</sup> William Cudworth, *Round About Bradford* (Bradford, 1876), p. 231.

<sup>79</sup> BI NRP 1827; BI Ord.P. 1827, Deacon, George Hepper. According to the *Clerical Guide* of 1836 Horbury was worth £225. Hepper's salary was £120 p.a.

<sup>80</sup> *Christian Remembrancer*, vol 1 (1832), p. 510.

In the period 1833 to his death we know the names of at least sixteen, perhaps as many as twenty-one, men who were successfully prepared for deacon's orders, at York, by Snowden.<sup>81</sup> The first students were prepared at Bawtry; when he was preferred to Swillington in 1837 his students moved with him. It seems there were many others, since Henry Chapman, in his ordination papers prepared just after Snowden's death, says that Snowden had prepared more than forty men for the Church.<sup>82</sup> That this was a major part of his life's work is clear from his will, where he asks that the silver plate given to him by his pupils, will remain in his family as an heirloom.<sup>83</sup> Most of his students had no university education, but John Hepworth Gresham was a Cambridge graduate sent to Snowden after failing his ordination exams.<sup>84</sup> One man chose Snowden instead of University: Thomas Powell left Queen's College, Oxford, when he 'heard of the permission given to Mr Snowden by his Grace at York', because he thought that studying there would, 'suit my feelings better than those of the University'.<sup>85</sup>

<sup>81</sup> Thomas Powell (BI Ord.P. 1833, Deacon); Benjamin Fearnley Carlisle (BI Ord.P. 1833, Deacon); George Hadley (BI Ord.P. 1833, Deacon); Henry Short (BI Ord.P. 1853, Deacon); Richard John Sparkes (BI Ord.P. 1836, Deacon); John Hepworth Gresham (BI Ord.P. 1836, Deacon); George William Holt (BI Ord.P. 1837, Deacon); George Thomas Sharland (BI Ord.P. 1837, Deacon); Edward Gilbert (BI Ord.P. 1837, Deacon); Francis Keeling – Keeling had begun his training with James Knight at Sheffield (BI Ord.P. 1837, Deacon); Henry Prior (BI Ord.P. 1838, Deacon); Edward Robinson (BI Ord.P. 1838, Deacon); Charles Cooke (BI Ord.P. 1838, Deacon); Henry Marshall (BI Ord.P. 1839, Deacon); William Shepherd Cotterill (BI Ord.P. 1839, Deacon); Henry Chapman (BI Ord.P. 1848, Deacon). Snowden seems very likely to have had some connection with the following men: George Gray Stuart – Snowden was one of the signatories to his two year testimonial. Prior to this he had been in Bristol diocese, (BI Ord.P. 1833, Deacon); Henry Middleton – although matriculated at St Catharine's, Cambridge, he was ordained as a literate, Snowden signing his three-years testimonial, (BI Ord.P. 1834). Snowden was also signatory to the testimonials of the following three men who do not appear, from the evidence of their baptismal certificates, to have been local: William Samuel Hartley (BI Ord.P. 1835, Deacon), John William Smith (BI Ord.P. 1835, Deacon), Edward Ellis (BI Ord.P. 1846). All these men were studying at university or were graduates, suggesting either that they had some personal connection with Snowden or that perhaps they had some arrangement with him for preparation for ordination examinations.

<sup>82</sup> BI Ord.P. 1848, Deacon, Henry Chapman. Snowden was preparing some men for the Church during his time at Horbury. James Dransfield spent time with Snowden at Horbury before reading with Thomas Rogers: Henry James Moorhouse and Charles Augustus Hulbert, *Extracts from the diary of the Rev Robert Meeke... also...the history of Slaithwaite Free School* (London, 1874), p.116. Snowden's curate, Hepper, a graduate, also described himself, somewhat ambiguously, as a pupil of Snowden (BI Ord.P.1827, Deacon, George Hepper).

<sup>83</sup> Will of William Snowden, BI PCY will, William Snowden of Swillington, proved August 1847.

<sup>84</sup> John Hepworth Gresham (BI Ord.P. 1836, Deacon).

<sup>85</sup> BI Ord.P. 1833, Deacon, Thomas Powell.



In the 1840s recruitment of literate ordinands to York diocese dwindled almost to nothing.<sup>86</sup> This did not signal the end of Snowden's training activities and his school became one for graduate ordinands.<sup>87</sup>

To Divinity Students. The Rev William Snowden, BD, rector of Swillington, nr Leeds, and formerly master of the School for literates at Bawtry, is still authorized by his Grace the archbishop of York, to assist graduates in the study of theology, the composition of sermons etc. Terms known on application.<sup>88</sup>

We do not know whether this was a concession granted to Snowden by the archbishop to help him adjust to a loss of livelihood, or whether this indicates Harcourt's genuine interest in professional, pre-ordination training for graduates— if the latter, this is an interesting addition to the pre-history of the diocesan theological colleges.

We know that Snowden's students were given a classical and theological education, but it seems that they were also given opportunities for pastoral experience. Henry Chapman explained that he has assisted Snowden in 'all the duties of the parish, visiting the poor, conducting Sunday School, and reading the lessons in church'.<sup>89</sup>

Snowden is particularly notable because in 1830, just before his School for Literates seem to have got off the ground in Bawtry, he mounted a printed defence of the literate clergyman. And interestingly, whilst earlier defences had been based on a pragmatic need for the literate clergyman to fill the gap left where graduates would not go, Snowden subtly suggested that in some respects a literate might just make a better clergyman than a graduate. His pamphlet is entitled *The Church. The Case of "non-graduate clergymen", usually called "literates", dispassionately considered in a letter respectfully addressed to His Grace, William, Lord Archbishop of Canterbury*. It is, actually, anonymous, the author being 'A Yorkshire Incumbent'. The identification of the author as William Snowden has been made on the title page in a nineteenth-century hand in the British Library copy – an identification there is no reason to doubt. Although purporting to be a 'dispassionate consideration', in many ways it is a passionate work – Snowden himself was a literate. A pupil of Hemingbrough Grammar School in the late eighteenth century, which had a high reputation for classical scholarship, he seems, like so many literates, to have prepared for ordination whilst employed as an usher.<sup>90</sup> Only in 1827, when he was already beneficed, had he

<sup>86</sup> Slinn, *YAJ* 80 (2008), p. 171.

<sup>87</sup> Other ordination training opportunities available to graduates for the home ministry in the early 1840s were Chichester Diocesan Theological College (opened 1839, but which did not flourish in its early days), and Wells Theological College: *A Dictionary of English Church History*, ed. S.L. Ollard and Gordon Crosse (London, 1912), p. 589.

<sup>88</sup> *Ecclesiastical Gazette* vi (1843), p. 134.

<sup>89</sup> BI Ord.P. 1848, Deacon, Henry Chapman.

<sup>90</sup> BI Ord.P. 1808, Deacon, William Snowden. He was a classical assistant for two years at Hemingbrough, then at Bingley Grammar School for two years and eight months.

entered himself on the boards of St John's, Cambridge, under the ten-year statute which allowed men over the age of twenty four to qualify for a BD with only a limited commitment to residence, and by this period, it was being said, with only a limited commitment to learning.<sup>91</sup> We might see this as symptomatic of a general disquiet amongst literate clergy about their prospects, which will be discussed further below.<sup>92</sup>

Snowden's talents, even though a literate, were not overlooked. He published a set of well-received sermons and was known to his diocesan,<sup>93</sup> which may explain why he did not have to wait the ten years to get his BD: in May 1829 he was awarded a Lambeth BD.<sup>94</sup> Perhaps encouraged by this favour, he directed to the very prelate who had awarded him his degree, an appeal on behalf of other literates. As he admits, his pamphlet was occasioned by the increasing severity with which certain bishops had begun treating non-graduates. Refusing to ordain literates, he points out, is opposed to the 34th Canon, which merely requires that ordinands be educated, not that they should have been to university. Not only that, but Snowden had heard disturbing reports that some bishops had begun to withhold employment from literates already ordained: the bishop of Gloucester, for instance, had made it a rule that all curates should be graduates. Another bishop was refusing to institute literates to benefices, and the Admiralty Board had begun to accept only graduate applicants for naval chaplaincies. All of this was obviously highly disturbing to a literate.<sup>95</sup>

Snowden developed his argument by examining the differences between a literate clergyman and a graduate one which result from their education and which have an impact on the success of their spiritual and pastoral labours. Success as a parish clergyman, Snowden said, depends very materially upon a man's moral and religious habits—his general conduct. Did college life give a graduate any advantage in this? 'Our Universities cannot, I think, be regarded by even their warmest partisan as the best schools of moral discipline'. The literate, he said, having lived a more secluded

<sup>91</sup> See for instance, Philotheologus, *A Letter to the Right Reverend John, Lord Bishop of Bristol, respecting the additional examination or total abolition of ten-year men in the University of Cambridge to which are added observations on Mr Samuel Perry's letter to the Public Orator, and a refutation of the accusations contained therein against the Lord Bishop of London* (Cambridge, 1825), pp. 12-14.

<sup>92</sup> Information about Snowden's enrolment at Cambridge from the St John's Biographical Database maintained by St John's College, Cambridge. My thanks to Naomi Herbert, Library Assistant, for making this information available to me.

<sup>93</sup> William Snowden, *Sermons, doctrinal, practical, and occasional*, 2 vols (London, 1820-3).

<sup>94</sup> *Gentleman's Magazine*, June 1864, p. 771.

<sup>95</sup> Snowden, *The Church*, p. 10.



life, having had more regulation in his habits, and not having been able, generally, to afford depraved appetites, could be argued to have had the better preparation.<sup>96</sup> Successful clergymen also, he argued, had habits of liberality and economy – but these were rarely formed at university since graduates tended to go down with debts and a deep distrust of tradesmen. These young graduates had little money available for liberality and little inclination to spend it to the benefit of their parishioners. In addition, university developed expensive tastes. Snowden points out that a literate's private education did not allow a young man to run up debts, gave him little chance to acquire expensive habits and produced a clergyman who could manage better on a small stipend.<sup>97</sup>

And what about the actual knowledge acquired at university? Did this make the graduate stand out above the literate? Snowden contrasted the curricula at the two Universities. Literates, said Snowden, knew as much mathematics as any Oxford graduate. And graduates of Cambridge knew far less of Classics than a literate man. And if the mathematical course of studies at Cambridge was really significant, why did bishops not set mathematical examinations?<sup>98</sup>

Neither university at this stage offered any significant course of theological study, and neither offered any opportunities to engage with any distinctive professional body of learning. The knowledge expected of a graduate when he went up for his ordination examination was fairly straightforward. He should be a competent classicist, with Latin and New Testament Greek, and he should have studied divinity, biblical history and church history, and be able to demonstrate his Anglican orthodoxy – the necessary boundaries of this knowledge normally being made clear by the ordaining bishop's book list. Snowden made it clear that the literates who presented themselves for ordination had this knowledge in equal measure to the graduate.

Snowden's defence seems to have dropped into a void. At this period no one was really ready to listen to a defence of literates. The universities were confidently asserting their ability to turn out enough graduates, and it would be the next decade before they were proven wrong, and the utility of the non-graduate and the non-gentleman (not entirely synonymous terms although often treated as such) was not discussed with any degree of seriousness.<sup>99</sup> And anyway, there were other English universities, Durham adding its contribution to the graduate total from the mid 1830s, and London, although specifically not intending to offer theological degrees or compete with Oxford or Cambridge in providing clergy, were nevertheless proof that the number of graduates could be expected to increase. The two ancient

<sup>96</sup> Snowden, *The Church*, pp. 13-5.

<sup>97</sup> Snowden, *The Church*, pp. 15-19.

<sup>98</sup> Snowden, *The Church*, pp. 24-25.

<sup>99</sup> James Heywood, 'Statistics of the Universities of Oxford and Cambridge', *Quarterly Journal of the Statistical Society of London*, October 1842, p. 235.

universities had been listening to criticisms, and changes to their curricula and examinations followed. It was to be another thirty years, though, before the graduate gap opened up again, this time nationally rather than regionally, and it became imperative that the utility of literate clergy should be revisited.

### THE SIGNIFICANCE OF THE CLERICAL COLLEGES

Harcourt had been archbishop of York for almost twenty years before he introduced his scheme of approved tutors for non-graduate ordinands. He had inherited from his predecessors a diocese in which literate clergy formed a significant part, sometimes a majority, of the workforce, and it seems that he was content to allow things to go along in much the same way as they always had done, although it is clear that he could and would suggest to ordinands who failed their examinations a period with a recommended tutor for orders.<sup>100</sup> We might imagine that the spur for Harcourt's tightening up of his required qualifications for ordination was a concern about the reputation of the diocese with those outside, rather than a concern about pastoral standards and professional competency within the diocese. Certainly there is no evidence that he thought that non-graduate clergy resulted in a poorer quality of pastoral care. A correspondent in the *Gentleman's Magazine* for 1819 mentioned that 'His Grace of York has oftener than once been pleased to say, that, generally speaking, he has found the non-graduated [sic] Clergy to make the most exemplary parish priest.'<sup>101</sup> But the 1820s saw significant concern about the nature and quality of the clergy, and in the public letters and pamphlets forum there were a number of ugly spats which showed that the debate about professional fitness was still playing in the court of status, rather than of professional competence or skills. The ancient universities were in a bullish mood, confidently presenting themselves as both the ancient cradle of the Church, and also as its proper future training ground; and, unsurprisingly, given the presence of their alumni in nearly all senior positions in the Church and government, this view had considerable support. Those who saw that the universities were perhaps not ideal places for future custodians of souls generally proposed alterations in university discipline, special treatment of ordinands at university – for instance by separating them in colleges for those intended for the church – or suggested supplementary post-graduate training, rather than proposing the development of non-university methods of education.<sup>102</sup>

<sup>100</sup> When John Fox offered himself for orders in 1827, he had, at the archbishop's wish, been reading with John Graham, rector of St Saviour's, York, for the previous three years (BI Ord.P. 1827, Deacon).

<sup>101</sup> *Gentleman's Magazine*, 1819, p. 420.

<sup>102</sup> See for instance, A Graduate, *An Enquiry into the Study and Discipline adopted in the two English Universities, as preparatory to Holy Orders, in a letter respectfully addressed to the Right Honourable Robert Peel* (London, 1824).



In 1825, a published letter to the Bishop of Bristol was sweepingly dismissive about the quality of non-graduates. The author, Philotheologus, spoke of men ordained who 'couldn't construe a verse of Greek testament', and, perhaps worse, he said he could point to several clergymen who had formerly been blanket weavers, linen-drapers, shopmen and porters.<sup>103</sup> Philotheologus then issued a challenge:

of the expediency or necessity of denying ordination to all non-graduates in Wales and the North of England, I will not now express an opinion ... being content to leave the consideration to those learned prelates who are so competent to come to a decision.<sup>104</sup>

But, he pointed out, a plea of scarcity of regularly educated candidates is not relevant because the universities overflow with students.<sup>105</sup> He then praised bishop Blomfield's new policy at Chester:

I rejoice to see that one of the Northern Bishops, who is amongst the most illustrious of Granta's sons, has arisen to protect the rights of graduates, and won't ordain a non-graduate unless he can't get a graduate, and then only takes St Bees men.<sup>106</sup>

The northern bishops were being named and shamed. And they responded almost directly to the challenge, not with a defence of the utility of clergy, but with a public declaration of standards. At the end of 1825 it was reported that the northern bishops had as a whole determined that they would in future ordain no candidates for orders who had not graduated at one of the universities, the college of St Bees in Cumberland being the only exception. The decision was reported to have been made because of the increasing numbers graduating from the universities who were having problems finding a title for orders.<sup>107</sup>

A short time later, in 1827, Archbishop Harcourt brought in his regulation about ordination preparation, although we might imagine that his plans had been known in the two preceding years. In a modified version of the northern bishops' rule, he required non-graduates to study at St Bees Clerical College, or to spend two years 'under a clergyman authorized to prepare candidates for orders'. From this it becomes clear that, despite the public resolution of the northern bishops, Harcourt still expected to need to ordain a number of literate candidates. He did not expect forthcoming cohorts to comprise entirely men from university or St Bees – he needed a much more pragmatic domestic policy.

Looking at those men ordained before and after Harcourt's regulation, and the tutors they had studied with, it is clear that it did have some effect. Certainly the

<sup>103</sup> Philotheologus, *A Letter to the Bishop of Bristol*, pp. 57-8.

<sup>104</sup> Philotheologus, *A Letter to the Bishop of Bristol*, p. 55.

<sup>105</sup> Philotheologus, *A Letter to the Bishop of Bristol*, p. 59.

<sup>106</sup> Philotheologus, *A Letter to the Bishop of Bristol*, p. 59. Charles James Blomfield was the only Cambridge man amongst the northern prelates at this time.

<sup>107</sup> The report was carried by the *Gentleman's Magazine* (Nov. 1825, p. 461) and the *Quarterly Review and Ecclesiastical Record* (vol. 3, Dec. 1825, p. 266).

tutors mentioned in post-1826 candidates' papers are, by and large, those men authorized by the archbishop, the most significant being Thomas Rogers, James Knight, James Barber and William Snowden. But Harcourt was unable to keep even to his pragmatic ordination regulation, and he still continued to ordain men who had neither graduated from university, nor St Bees Clerical College, nor spent two years with an authorized tutor. On occasions we might imagine that this was because the candidate was too well connected or recommended to be refused,<sup>108</sup> and sometimes, perhaps, because their tutors, whilst not authorized, were known to the archbishop.<sup>109</sup> Sometimes a private interview with the archbishop seems to have led to a waiving of the rules.<sup>110</sup> For others we just do not know. Excellent scholars with an obvious desire to serve may have been hard to turn down, along with the poor, home-educated, sons of York clergymen whose benefices could not support the cost of educating their sons at university. And whilst there continued to be more positions for curates than the number of suitable, qualified men (according to the regulations) coming forward, Harcourt would not have had much choice.

If the educational backgrounds of successful deacons are considered, before and after Harcourt's regulation, we see that it certainly had an impact. It is worth noting first, however, that this is the period when the proportion of literate ordinands recruited to the diocese began to fall off steeply, and the reasons for this are not entirely clear. It could be attributed to general factors, such as an increased number of graduates seeking titles; or the increased attractiveness for them of curacies in the diocese. Or increasing proportions of graduates could have been a direct result of Harcourt's regulation. Perhaps, after the tightening up of requirements, many literates were discouraged from applying for orders, and either refocused their career ambitions away from the Church, or sought ordination elsewhere. It would be significant in this respect to examine any changes in the proportions of literates in those other dioceses which had a reputation for accepting them. How effectively had the other northern bishops been able to put their resolution into practice, and how did the policy of one diocese impact on the recruitment pool for the others? In all likelihood these factors worked together. Men from poorer homes who in the first two decades of the nineteenth century would have prepared for the Church with a tutor for orders and private study, in later decades would have seen literates disparaged in public and their ordination discouraged by the bishops and, if they had determined on a career in the Church, would have joined the increasing numbers at the universities where the increased competition from new institutions had had the effect of making education more available and affordable.

<sup>108</sup> Not only had Charles Fletcher not prepared under an authorised clergyman, he was older than Harcourt's upper limit of 30 years. He was ordained nevertheless due to the recommendation of the archdeacon of Nottingham (BI Ord.P. 1827, Deacon, Charles Fletcher).

<sup>109</sup> For instance, John Seaton (BI Ord.P. 1831, Deacon) was prepared at the 'formulary of W. H. Havergal' in Bristol diocese. Havergal was used as a tutor by the Bristol Clerical Education Society, see Lewis, *Dict. Evang. Biog.* Joseph (Esmond) Riddle.

<sup>110</sup> James Yelverton Wilson (BI Ord.P. 1834, Deacon).



In the years 1824 and 1825, 22 per cent and 18 per cent, respectively, of literate ordinands had prepared for orders in a way that Harcourt would later put his seal of approval on. We must assume that Harcourt had made his intentions known before 1827 because in 1826 the numbers of ordinands prepared in authorised ways rose to 47 per cent, a figure almost exactly matched in 1827, which was the first year the regulation was applied. In the following year the numbers qualifying according to the regulation rose to 67 per cent, but this was to prove a high point in the scheme – over the decade 1827-1837, literate ordinands with approved education comprised 50 per cent or less of the candidates in more years than they exceeded 50 per cent. Even if we assume that the archbishop later modified his regulation to approve men trained at St David's Lampeter, and those with a Licence in Theology from Durham, the figures hardly rise.

In terms of the overall significance of the archbishop's plan for individual tutors, we have seen that the regulation gave an opportunity for three men to offer training to a significant number of ordinands. Thomas Rogers was the most important of Harcourt's approved tutors in the period immediately after the regulation: in 1827 he had taught seven out of a total of seventeen literates ordained deacon. In this year there were only two St Bees men in the cohort. Rogers was by this time in the last few years of his life and his contribution tails off after this. The work of training ordinands was taken up by John Barber and William Snowden. The high point of Snowden's contribution was 1833 when five of the seventeen literate ordinands were his pupils, a year in which St Bees provided four. Barber's most productive year was 1835 when he presented five of the eighteen non-graduate candidates for ordination, when St Bees provided only four. Certainly, when added together, the students of these men were an important part of the incoming clerical cohort, each of them providing more new clergymen for the diocese than the college at St Bees.

One of the limiting factors on Harcourt's plan may have been that there were not enough approved tutors to oversee the preparation of all literate men. Obviously, taking on the training of clerical students was a big undertaking, and we might imagine that there was only a limited number of clergy in a position to act as approved tutors. It required a considerable amount of time to be put aside from parish duties for teaching, although in compensation the students could help relieve the tutor of some of his Sunday School teaching and parish visiting. A successful enterprise also required a place to house the students – ideally in the home of the tutor, which probably restricted it to those fortunate enough to inhabit the parsonage house. It also required a tutor with excellent classical language skills, and theological education, and a reputation as a theological moderate. Harcourt was comfortable with the Evangelicals, many of whom would have described themselves as moderate Calvinists, but would tolerate no extreme Calvinism. The potential rewards would, however, be significant to a clergyman needing to supplement a meagre benefice income. We know that tuition with Thomas Rogers cost £30 per annum.<sup>111</sup> James Knight was paid

<sup>111</sup> WYAS: Wakefield, C84/1, 1827; Gill, *Memoir of William Gill*, p. 4. Whilst at University, in his first year, Rogers had cost the Society £50 11s. 6d. Fees at his school in Leicester in the 1790s had been 18 guineas per annum for boys who boarded.

60 guineas per pupil per annum by the Elland Society to take pupils. Walter Smith seems to have been paid in the region of £50 per pupil for tuition and board in 1819.<sup>112</sup>

It is these charges which give a clue to the other likely limiting factor on the scheme. Cheaper perhaps than a minimum of three years at University, two years with an approved tutor was still an expense that many men could not meet. In his autobiography, William Gill recalled how his £60 of savings, accumulated while working as a private tutor in a family, afforded him only one year with Thomas Rogers. His tuition cost him £30 per annum, his weekly accommodation 7s. He was enabled to be ordained only because Rogers wrote to the archbishop saying Gill was ready for ordination before his two years were completed.<sup>113</sup> Joseph Senior, ordained in 1832, explained that the loss of his father had meant that he could not go to university; moreover, he had been unable to afford to spend time with a tutor, not able to give up his post as master of Batley Free Grammar School.<sup>114</sup> Time with a tutor for orders in Yorkshire was not necessarily cheaper than the other non-graduate alternatives. A year at St Bees would have cost £20 per annum for tuition fees with lodgings and board extra and a commitment to two years' study.<sup>115</sup> The course at St David's Lampeter, was intended to offer an education at a total cost of £50 per annum over four years.<sup>116</sup> Once the whole expenses of tuition and board and lodging were met, the cost of the approved non-graduate routes to ordination were not a great deal cheaper than the university route – although of course, with the appropriate background in Classics, generally of shorter duration. It is clear that even requiring two years with a tutor for orders, was simply too much to ask of many men.

## THE END OF THE SEMINARIES

There is no doubt that, when graduates were available, they were preferred to literates. From the mid 1820s, not only did archbishop Harcourt have a policy which, by reducing the ease with which literates could be ordained, favoured graduates, but by and large the beneficed clergy favoured them too. And since a title was a prerequisite for ordination, the preferences of the beneficed clergy directly influenced the type of man receiving orders. However useful literate clergy were in filling the recruitment

<sup>112</sup> For Elland Society expenses concerned with educating their students see WYAS: Wakefield C84/4; see C84/1 July 1825, for payments to James Knight.

<sup>113</sup> Gill, *Memoir of William Gill*, p. 4.

<sup>114</sup> BI Ord.P. 1832, Deacon, Joseph Senior.

<sup>115</sup> Trevor Park, *St Bees College: pioneering higher education in 19th century Cumbria*, (St Bees, 2008), p. 37.

<sup>116</sup> The fees at St David's College Lampeter, were such that there were repeated, damaging rumours that it was as expensive as studying at some Oxford colleges. The tuition fees at Jesus College were said to be as low as 12 guineas a year compared to St David's £20, Dowland, *Nineteenth-Century Anglican Theological Training*, pp. 23-4.



gap, clergy and laity had a preference for a graduate. Henry Heap, vicar of Bradford and himself a non-graduate, was glad that his nephew, who had been his curate for six years, was leaving him to study at Oxford, saying that he believed that in large towns, titles should be given only to graduates.<sup>117</sup> If literate men themselves thought that they had received a second-best preparation, there is little surprise that, when given the option, even they gave titles to graduates in preference to literates.

This preference could only be expressed, however, if there were enough graduates coming forward to take orders to make literates dispensable, and in the diocese of York this began to happen from the late 1820s. The increasing numbers enrolling at Oxford and Cambridge, along with the arrival of Durham and London University providing more affordable education, increased the number of graduates looking for employment. Added to this, the decreased size of York diocese with the formation of Ripon in 1836, the increasing pace of Church reform, the regulation of curates' stipends, and the augmenting of benefices, began to make the Church in general, and York diocese in particular, look more attractive as a place to start a career.<sup>118</sup> Certainly the ordination figures show that by the 1840s, York no longer needed these clerical institutions for literates, and archbishop Musgrave was able to insist that all his ordinands were graduates.<sup>119</sup> Whether other northern and Welsh dioceses were able to increase their proportion of graduate ordinands at the same time, or whether York's higher demands drew graduates away from other dioceses, remains to be explored.

High graduate employment was only a temporary phenomenon in the diocese of York. By the 1860s York's recruitment problems were again such that the proportion of literates was high, but now the debate about providing affordable, professional, education for the clergy, literates and graduates, took centre stage nationally. The direction in which this provision went was very different from the small seminaries run by Evangelical clergymen to supplement their stipends which Harcourt had harnessed to regulate the quality of his literate candidates. A plethora of new colleges was set up to address problems of professional training for the clergy and, although Chichester, Wells and Cuddesdon were founded for graduates, Chichester did, from 1848, admit a very few literates and Lichfield (founded 1857), Salisbury (founded

<sup>117</sup> BI Ord.P. 1835, Deacon, Benjamin Milnes.

<sup>118</sup> Slinn, *YAJ*, 2008, pp. 169-80.

<sup>119</sup> Musgrave actually ordained a number of literates in his first year in the diocese, under the impression that Harcourt had promised them orders, for instance Henry Chapman, in 1848, (Ord.P. 1848, Deacon, Henry Chapman). By this date, not only were the small diocesan seminaries not needed, it seems that the archbishop was able to dispense with St Bees candidates. This may have been largely because there were more highly qualified candidates for titles; however, it should be born in mind that the archbishop of York and bishop of Carlisle are said to have refused candidates from the college under the ultra-evangelical Principal, Robert Peddar Buddicom, 1840-1846, Park, *St Bees College*, p. 59. Earlier in his career Buddicom had tutored William Scoresby, the retired arctic explorer, for Orders at York, Tom Stamp and Cordelia Stamp, *William Scoresby, arctic scientist* (Whitby, [1975]), p. 108.

<sup>120</sup> A. Haig, *The Victorian Clergy* (London, 1984), pp. 83-7.



1861), Gloucester (founded 1869), Lincoln (founded 1874) and Truro (founded 1877), from their beginnings accepted non-graduates.<sup>120</sup> There were other options for non-graduates from the 1840s in addition to St Bees. St Aidan's Birkenhead, founded in 1846 as a private venture, offered a broader training to non-graduates, including parochial work, which cost £63 per annum in the 1860s. Queen's College Birmingham, King's College London and Durham University all offered shorter courses with the non-graduate in mind. The Elland Society continued to favour university as the proper course of preparation for ordination, but its later efforts in providing clerical training for graduates at Leeds, and proposals for colleges at Hull and Sheffield, were of a very different type from the small-scale parochial training of Rogers, the Knights, Barber and Snowden.

Essentially Harcourt's experiment was short-lived and had no obvious successor. The future of clerical training was to be, by and large, with larger, formal colleges rather than with small-scale, intimate, parish-level tuition, although St Aidan's did offer the practical, pastoral, elements the students of the Yorkshire seminaries seem to have enjoyed, albeit on a far larger scale. Close study of other dioceses, particularly those in Wales and the northern province, will reveal how unique Harcourt's solution to his literate problem was. In terms of the use of the tutors for orders and local seminaries for graduates who wanted or needed assistance in preparing for ordination, Harcourt was not alone. From time to time, various clergy had decided that a period of supervised preparation was desirable. From Bishop Thomas Wilson, on the Isle of Man, who took ordinands to reside with him before they took orders,<sup>121</sup> to the Rev. Dr Burrow who issued a prospectus in 1824 inviting young graduates to come and prepare 'every branch of study of practice which a conscientious man would wish to possess before he enters on his ministry',<sup>122</sup> there had been a general acceptance that some time spent in the parish was a good thing. Debates in the Convocation of Canterbury and the Church Congress throughout the 1860s and 1870s continued to support, to some extent, the idea that small-scale parish training for graduates was a good idea. If Harcourt's approved tutors for orders had any obvious successor in Yorkshire then it would perhaps be in C. J. Vaughan, who, from his time as vicar of Doncaster gathered around him young clergy, known as 'Vaughan's Doves' to train and guide in a parish context.

By the 1870s the Church as a whole was reluctantly facing up to the problem that had been familiar to Harcourt and other northern and Welsh bishops at the beginning of the century. At the Church Congress of 1871, T. P. Boulton, Principal of the London College of Divinity, was of the opinion that the policy of giving preference to graduates and only grudgingly accepting or (in the case of three dioceses) excluding non-graduates, 'is working an evil'. At the Church Congress of 1873, Bishop Magee of Peterborough explained the difficult position he found himself in as diocesan bishop:

<sup>121</sup> Ollard and Crosse, *Dictionary of English Church History*, p. 588.

<sup>122</sup> A Graduate, *An Enquiry into the Study and Discipline*, p. 44.



Where the supply exceeds the demand, you may be as exacting as you please in your conditions of admission to Holy Orders; but where demand exceeds supply, you cannot choose the best of those who come, but you must make the best of all who do come.<sup>123</sup>

This was a sentiment that Harcourt would no doubt have seconded.

<sup>123</sup> For the debates in the Convocation of Canterbury and Church Congress see Bullock, *A History of Training for the Ministry*, pp. 12-148. In these discussions, in addition to Vaughan, John Sandford, archdeacon of Coventry and Warden of Queen's College Birmingham, and Edward Girdlestone, canon of Bristol, said that they had trained graduates in their parishes, Archdeacon Harris of Wiltshire mentioned that he had received parish training. For Vaughan's work see Bullock, p. 118. For an earlier, anonymous, proponent of parish training for graduates see, *On Clerical Education: a letter addressed to ... Edward, Lord Bishop of Llandaff. By a Clergyman* (London, 1832).





## THE NINETEENTH CENTURY LIMEKILNS AT BARNBY BASIN, SOUTH YORKSHIRE\*

By Harold Taylor

*The remains of nine limekilns survive at Barnby Basin, the former terminus of the Barnsley Canal, near the village of Cawthorne. This article uses business records and other contemporary evidence to look at trade on the canal and the distribution of lime products for building and agricultural purposes along the turnpikes of the hinterland of Barnby to the south, east and north, especially to the Holmfirth area. The canal was completed to Barnby in 1802 and the kilns continued in use until the early 1870s, by which time the transportation in the area had been revolutionised by the development of railways.*

A group of nine limekilns survives at Barnby Basin (Fig.1), the former terminus of the Barnsley Canal, near the village of Cawthorne, but in a ruined condition. Some, if not all, were built when the canal was completed to Barnby in 1802. The surviving nine are on the north-western side of the former basin, as shown on Figure 2. On the other side were two other groups of kilns, one of eight and another of three. All were built for the Barnsley Canal Company and rented from them by the operators of the kilns. They appear to be the 'continuous draw' type, a design which came into use in the 1750's, top-charged with broken limestone and coal or coke as fuel. A detailed survey of the kilns is given later in the text.

There were kilns at other locations alongside the Barnsley Canal, at Barugh locks and at Old Mill, Barnsley, as well as at the terminal basin of the Worsbrough branch of the Dearne and Dove Canal, but none of these has survived. Consequently the nine at Barnby are of special significance as reminders of the key role played by limekilns in the successful development of coal sales from the several collieries located along the valley of the Silkstone Beck and in adjacent areas (Fig.3).

Samuel Thorpe of Banks Hall rented kilns from the start in 1802 and continued to do so until 1851. Jonas Clarke of Noblethorpe Hall, owner of the Basin Colliery close to Silkstone village, began renting only in 1814, possibly because additional kilns had been built by that time. Kilns were rented also by other colliery owners, including the partners Thomas and Daniel Wilson between 1815 and 1828. Jonas Clarke, who died in 1822, was succeeded by his son, Robert Couldwell Clarke and,

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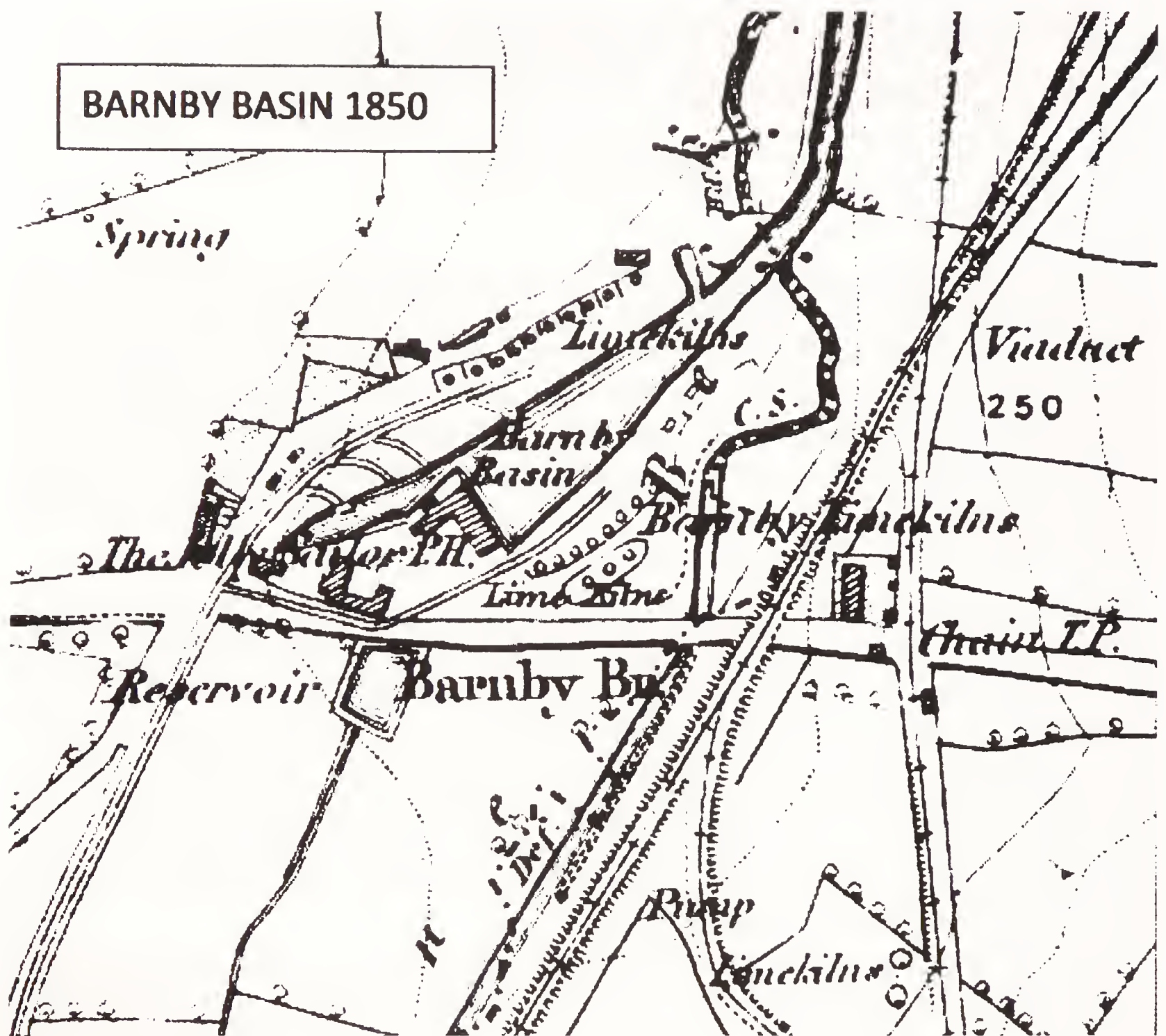


Fig. 1. Barnby Basin in 1850 (scale approx 1:3500)

after his death at the age of 46, by his widow, Sarah Ann, and his son, another R. C. Clarke. As the Clarke Records at Sheffield City Archives contain detailed information about the Clarke family's coal and lime businesses, it has been possible to examine through them the role of the Barnby kilns in commercial operations in the area, though the lack of archive material about the other kiln operators leaves a necessarily incomplete picture of the lime marketing activities based at Barnby.

The primary aim of the Barnsley Canal was to provide a much improved outlet for Silkstone's coal, as the wording of the Act of June 1793 makes clear:

An Act for making and maintaining a NAVIGABLE CANAL from the River Calder .. to or near the town of Barnsley and from thence to Barnby Bridge ... and certain RAIL WAYS ... to communicate therewith. It will open a cheap and easy access to many valuable and extensive mines of coal and other minerals in the adjacent country.



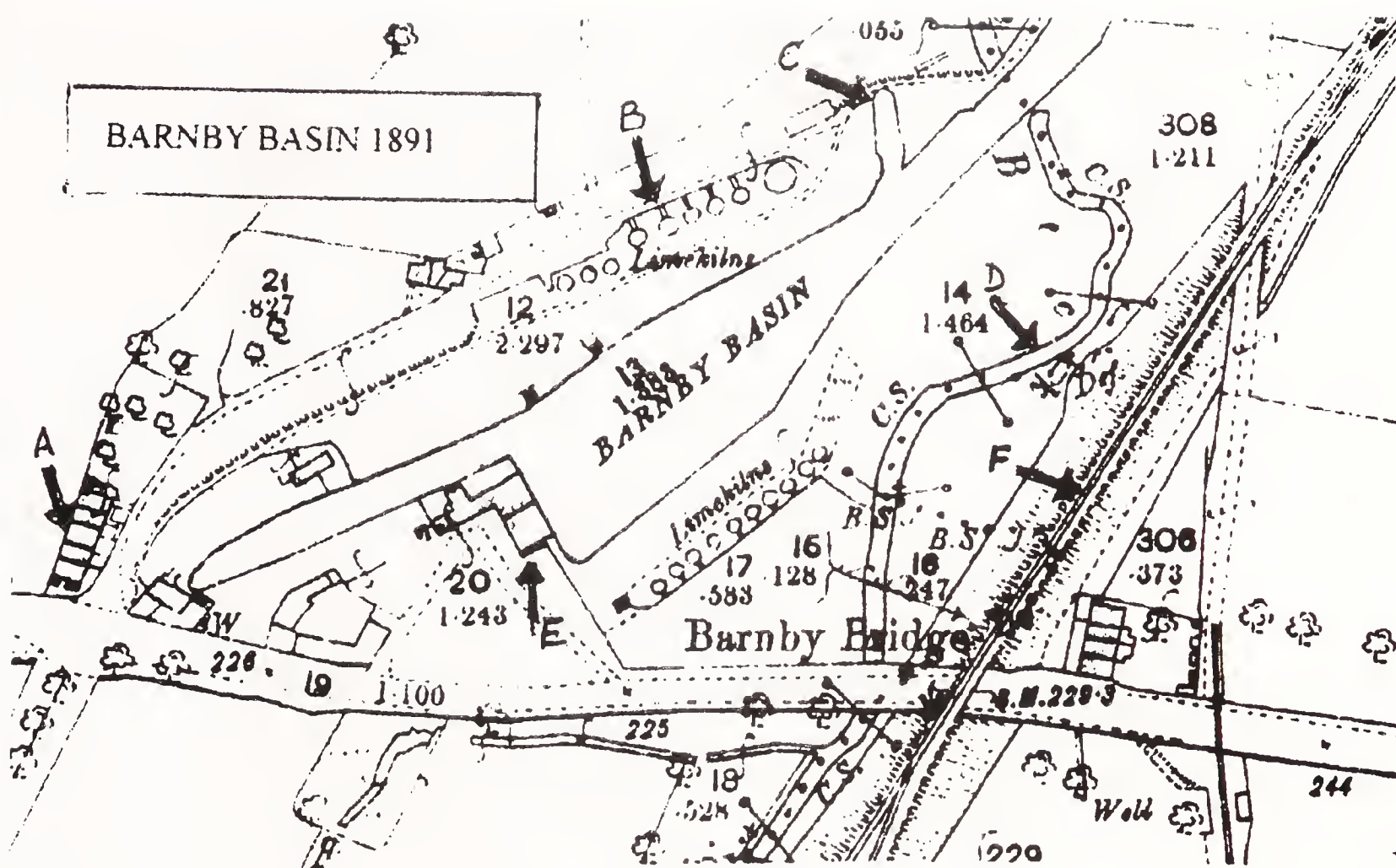


Fig. 2. Barnby Basin in 1891 (scale approx. 1:2500)

Key: A workers' cottages      B surviving kiln ruins      C dry dock  
 D Silkstone beck      E Warehouse & Inn      F 1850s railway  
 ('The Jolly Sailor')

The mines described here were extracting coal from the Silkstone Seam - a coal of outstanding quality. The *Universal British Directory* for 1793 describes the coal as 'a fine bed of minerale coal, the thickness of the bed six feet.'<sup>1</sup> Much later, in 1870, the Geological Survey described the coal as 'perhaps the most highly prized of the seams of the Yorkshire coalfield. Where at its best it is bituminous, very pure and has the highest reputation as a home coal. It makes coke of an excellent quality.'<sup>2</sup> Some of the mine operators had laid short lengths of track from their pits to the basin, notably the Low Moor Iron Company from their Barnby Furnace mine, and Samuel Thorpe from his mines in the Norcroft area. The Canal Company decided to extend the track from Barnby Furnace to the head of the Silkstone valley in 1809 (Fig.3) and in the following year, to extend the basin in order to achieve a quicker turn-round of the boats.<sup>3</sup> Tolls were charged for use of the railway. It is clear that the Barnsley Canal Company regarded the kilns— installed so promptly at the start of the canal's life— as

<sup>1</sup> John Goodchild Archive, Wakefield [JGA]. *The Universal British Directory of Trade, Commerce and Manufacture*, 2nd edn (London, 1793), vol. 1, part 2, p. 260.

<sup>2</sup> A. H. Green and R. Russell, *The Geology of the Yorkshire Coalfield in Memoirs of the Geological Survey, England and Wales* (London, 1878), section on economic geology.

<sup>3</sup> Quoted in John Goodchild, 'The Silkstone Railway' (1974), Typescript in JGA, p. 9.



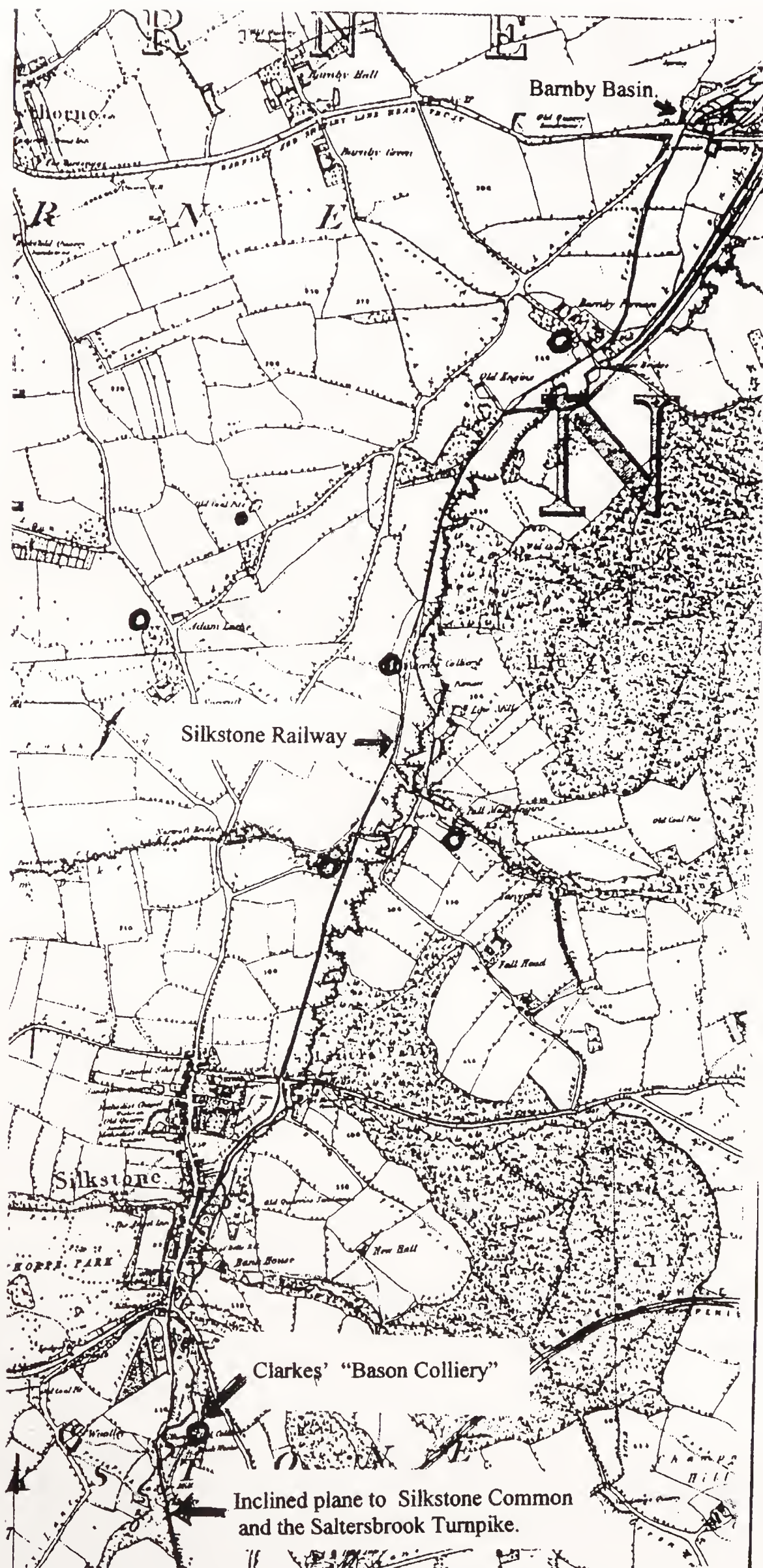


Fig. 3. Collieries in the valley of the Silkstone beck in 1851  
 (located on 6 inch Ordnance Survey map, 1851)  
 Key: ○ = collieries (not all operating in 1851)



vital for the profitability of traffic along it. In 1824 Joseph Priestley, the secretary of the Canal Company, presented the case for this:

Many boats carry lime (stone) up to bring coal down which would not fetch the coal but for the advantage of carrying lime. Anything calculated to reduce the sale of lime would cause the Company to suffer, not just because of the reduced lime carriage, but reduced coal too.<sup>4</sup>

Vessels which carried coal from the Barnby to Goole (after the development of this new port by the Aire and Calder Navigation Company in the 1820s) and the Humber or along the Ouse to Selby and York would pick up a return cargo of limestone at the wharfs on the River Aire at Brotherton and Knottingley. The resulting profitability of traffic enabled the Canal Company to set their toll charges at a moderate level, thus favouring all who were engaged in the coal traffic from Silkstone.

As there were kilns at Brotherton and Knottingley too, there was a welcome outlet for small coal ('slack'), used to fuel kilns, a particularly attractive proposition for the coal producers as slack had a limited market (although it was also needed in gas works, as at Selby and York). The sale of lime from the kilns also provided an element of diversification in the coal producers' business activities. White's 1822 *Directory* for the Brotherton area notes that the Magnesian limestone which outcropped in a broad band in the Brotherton-Knottingley area produced 'excellent lime for burning', and listed fifteen lime burning concerns at Knottingley.<sup>5</sup> An 1838 directory still lists more than nine 'lime merchants' there and explains that the activity remains important.<sup>6</sup> At Brotherton one of the lime firms—that of the Haxby Brothers—operated kilns and limestone quarries between 1800 and their bankruptcy in 1830.<sup>7</sup> During the period 1815 to 1818 they created three hundred yards of canal across Brotherton Ings from the foot of the limestone scarp to the Aire, linking quarries and kilns to the riverside wharf. Another short 'cut' of this kind was made on behalf of other lime producers of the area. Profitable journeys could be made between Knottingley or Brotherton and Barnby Basin, carrying coal or coke one way and returning with limestone. An invoice presented by Edward Gagg of Knottingley to Robert Clarke in 1835 provides an illustration of this. Clarke settled for the total of nine consignments of limestone received between February 1834 and September 1835 by paying two-thirds of the debt in cash and the rest in slack for use in Gagg's own kilns.<sup>8</sup> Clarke made a similar settlement of cash and slack with a Brotherton lime-burning concern, Watson and Staniland, in 1842, the invoice detailing a total of 570 stones of limestone between February and September. The Clarke Records also contain an invoice for limestone received by Robert Clarke from Thomas Leaster of Knottingley, and another for

<sup>4</sup> JGA, Barnsley Canal Papers.

<sup>5</sup> Edward Baines, *History, Directory and Gazetteer of the County of Yorkshire*, vol. 1, *West Riding* (Leeds, 1822), p. 472.

<sup>6</sup> William White, *History, Gazetteer and Directory of the West Riding of Yorkshire*, 2 vols (Sheffield, 1837-38), vol. 2, pp. 286-7, 310-11.

<sup>7</sup> JGA.

<sup>8</sup> Sheffield Archives [SA]. Clarke Records [CR], CR 135/C/4.

limestone from the firm Lockwood, Kemp and Blagden of Warmsworth Cliffs near Doncaster in 1842.<sup>9</sup> Here was another location in the limestone belt where there were quarries and also lime burning kilns in the Sprotborough area.

In building lime kilns so promptly on the completion of the canal, the Barnsley Canal Company doubtless realised there would be a good market for lime in the farmlands of the Pennine foothills to the west where the high rainfall leached the soils, many of which were derived from lime-lacking gritstones and sandstones. The early nineteenth century was a period in which agricultural improvements featured strongly, continuing the progress made during the later eighteenth century. Enclosures by Act of Parliament and associated land improvements, were taking place in the area to the west of Barnby. Enclosure awards for the Townships of Denby and Clayton West date from 1804, for Hunshelf and Ingbirchworth and for Thurlstone from 1810, Langsett in 1814 and Oxspring with Penistone in 1826. The evolution of the landscape through land enclosure in the Langsett Common area is illustrated by the farm at Daisy Ley Hill, one of the newly-created farms situated in a very accessible location alongside the Doncaster–Saltersbrook Turnpike.<sup>10</sup> Its fields were set out as a result of enclosure on Fulshaw Common, surveyed in 1820, and the 1851 Ordnance Survey clearly shows an area of relatively flat land featuring the large square or rectangular fields characteristic of parliamentary enclosure. This immediate area is known as 'the Whams', a term which signifies an area of relatively poor drainage: Daisy Ley was among the customers for Clarkes' lime. Other customers located close to the Saltersbrook Turnpike, such as Ecklands and Maythorne, had been established earlier.

The movement towards agricultural improvements is reflected in a 1793 Report by the Board of Agriculture, *A General View of the Agriculture of the West Riding*: 'In the Peak District the climate is cold and the land backward in vegetation, the soils very varied, but mainly wet and spongy', it reported, and the role of lime was made clear in a description of the farming of a Mr Boswell: 'It was common practice to spread two chalders of lime per acre over fallow land.' (A chalders varied from 32 to 40 bushels, according to its compactness.) The Report also describes the practice of a Mr Peach, farmer and landlord of the Angel Inn, who had no fewer than five farms, which were on 'deep clay': 'He limes most of the fallows with Derbyshire lime, using two five-horse wagon-loads per acre.' Peach stated that he found Derbyshire lime, derived from calcium carbonate, was better than lime from Doncaster, derived from Magnesian limestone, for agricultural use, though Doncaster lime was 'better for building'.<sup>11</sup> Lime improved the texture, and the workability of such heavy soils. During this period, before the construction of the Shepley Lane Head Turnpike by

<sup>9</sup> SA. CR 135/D/28.

<sup>10</sup> West Yorkshire Archives Service [WYAS] (Kirklees), 'A map of certain common allotments in the township of Langsett' (1830) by E. Taylor.

<sup>11</sup> G. Rennie, R. Brown and J. Shirreff, *General view of the agriculture of the West Riding of Yorkshire : with observations on the means of its improvement, 1793* (London, 1794), p. 123.



1830, Derbyshire lime probably reached the West Riding Peak District by means of the 'Mortimer Road', a turnpike from 1775 until its failure to attain renewal in 1813, passing through Grindleford and Strines on its course to Penistone.<sup>12</sup> There were, however, severe gradients near the northern end of this road, which may well have discouraged its use for heavy loads and it was to be the 'Doncaster' type of lime based on Magnesian, rather than Carboniferous, limestone that played the major part in land improvement in the upland area to the west of Barnby. Joseph Priestley, head clerk of the Aire and Calder Navigation Company (which had promoted the Barnsley Company) highlighted the important role of the Barnsley Canal in this development in his publication of 1831:

The making of this canal had been of incalculable advantage to agriculturalists in its vicinity by the facility it gives, but it has been particularly experienced by those employed by those bringing into cultivation the vast tracts of moorland lying to the north and west of its terminal at Barnby Basin.<sup>13</sup>

In the lower-lying areas nearer to the Basin too, lime was needed to improve heavy soils derived from the shales and clays of the coal measures which extend over large areas.

The Clarke Records make it possible to identify to some degree the area supplied with lime from Clarkes' kilns. In their 'Lime Ledgers', which cover the period 1834 to 1844 and 1851 to 1861, each page lists the purchases of lime by one customer, whilst their 'Day Books' record sales by the day. Despite some long gaps in the years covered, these records make it possible to discover a good deal about the operation of the kilns by Clarkes.<sup>14</sup> The map (Fig.4), compiled from these sources, covering thirty-one years, illustrates the area supplied by Clarkes', both with 'land lime' and 'building lime', as they described the products. The great majority of the customers were farmers, but there were the operators of market gardens and several mills – some of them woollen mills – several inns and also a brewery. Lime was also purchased by owners of some of the largest houses in the area – notably Bretton Hall, Cannon Hall at Cawthorne, and smaller houses such as Birthwaite Hall and Squirrel Hall near Darton. Clarkes' themselves took many loads to Noblethorpe Hall and to the colliery at Silkstone.<sup>15</sup>

Many of the customers could not be located on Ordnance Survey maps, the 1850 sheets on the six inch scale being the chief reference source, and there were some whose names are listed in the records but without an address. Consequently Figure 4 presents an incomplete picture of the sales area. Nevertheless it does offer a large sample of customers, showing that over the years the extent of that area remained much the same, extending broadly to the west but including locations in and among

<sup>12</sup> Howard Smith, by correspondence.

<sup>13</sup> Quoted from Priestley's *Navigable Rivers and Canals: a reprint of the Historical account of the navigable rivers, canals and railways throughout Great Britain* [Wakefield, 1831], with a new introduction by Charles Hadfield (Newton Abbott, 1969), p. 55.

<sup>14</sup> SA. CR, Lime Works Day Books: CR 53 (1829-30); CR 54 (1831-2), CR 55 (1843-5), CR 56 (1845-9), CR 57 (1849-56), CR 58 (1856-62); CR, Lime Works Ledgers: CR 59 (1838-41), CR 60 (1843-4), CR 61 (1851-62).

<sup>15</sup> SA. CR 57 and 58.



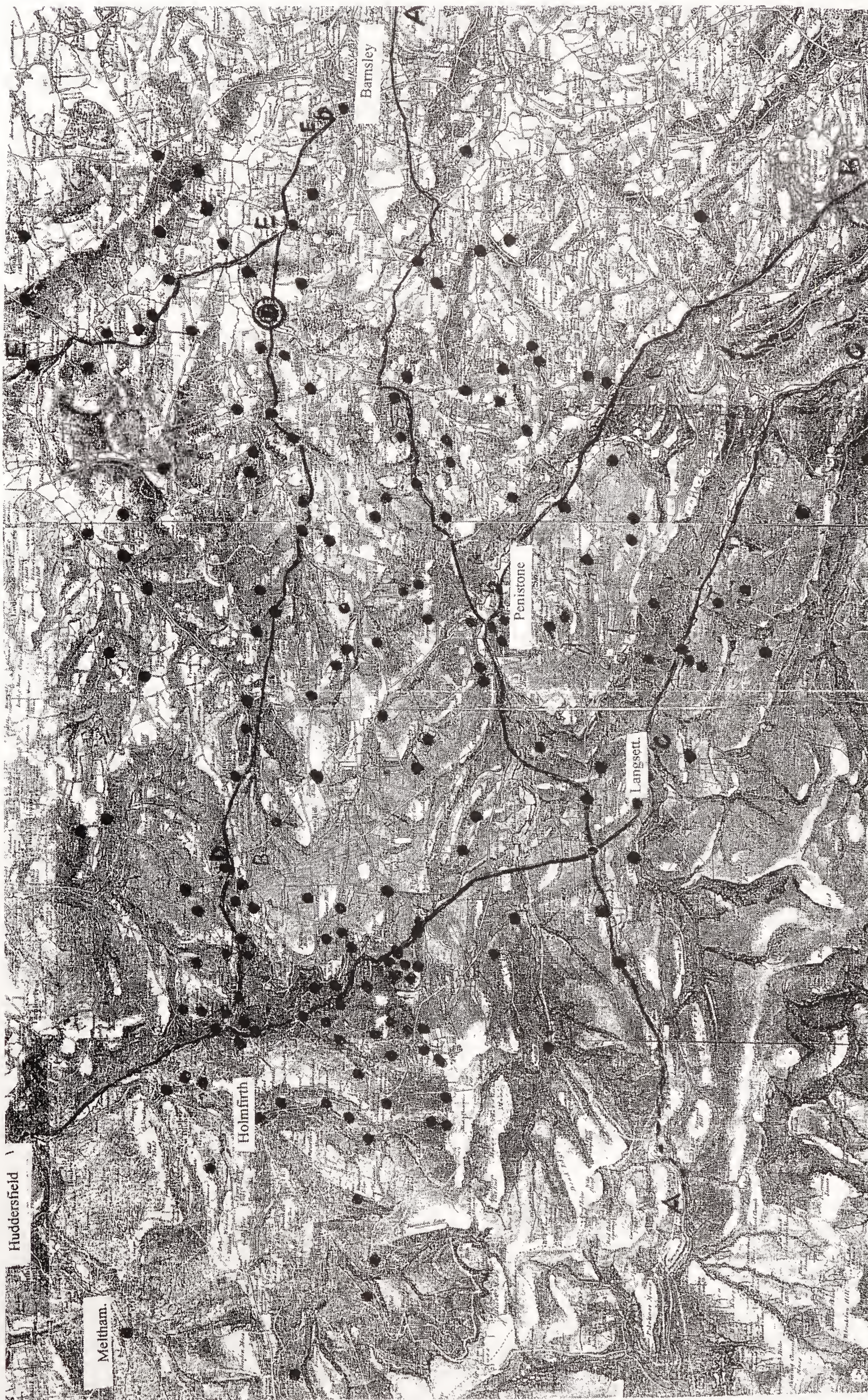


Fig. 4. Customers who purchased lime from Clarkes' at Barnby Basin (located on 1 inch Ordnance Survey map, 1840-41)



local villages to the north and north-east. To what extent Thorpe and other kiln operators served the same area is unknown as their records are missing.

The mid-nineteenth century edition of the Ordnance Survey on the one inch to the mile scale, used as a base for Figure 4, shows by its 'hachuring' the strong relief features of the area which doubtless made their impact on travel by horse-drawn wagon along the region's roads and lanes.

It is clear from Figure 4 that the available turnpike roads shown on this map influenced the pattern of lime customer locations, providing surfaces much superior to those of the township roads and minor lanes. Two turnpikes were available providing routes to areas westwards and north-westwards from Barnby in the early years of the kilns: the Doncaster-Saltersbrook road of 1741 and the Grange Moor road of 1759. The former passed within one and a half miles of Barnby, and the latter, reached via Barugh, was a similar distance away. As records of sales made before 1829 are lacking, the role of these routes for the early period of the Clarke kilns cannot be fully known. The Grange Moor road carried lime from Huddersfield in this period, however, as will be mentioned later.

A notable feature of the map (Fig.4) is the clustering of customer locations in the tributary valleys of the River Colne around Holmfirth, including the valley of the River Holme. This is particularly striking in view of the steep slopes which would be encountered on journeys to Barnby. It would appear that the availability of the Shepley Turnpike from 1830 had a major influence in producing this pattern. Jonas Clarke chaired the meeting in 1818 at which this turnpike was proposed and subsequently Jonas, along with Samuel Thorpe, were among the trustees.<sup>16</sup> In due course the Trust decided to place one of the toll houses immediately outside the entrance to Barnby Basin, a move which alarmed the Board of the Barnsley Canal who feared an adverse effect on the westward lime trade. Priestley, writing from the navigation office at Wakefield to the turnpike trustees in 1818, at the news of the toll house decision, argued that:

It would be an injury to the undertakers of the Aire and Calder Company were an additional expense laid upon the articles whereby the quantity would be diminished and also a loss to agriculture, being dependent on that kind of manure if you have not already an exemption clause in your bill for these articles which is a common clause in other turnpike acts.<sup>17</sup>

It was feared that tolls to be paid by customers as they left the kiln yard might prove a detriment to customers travelling from locations to the west, and so liable to affect the established voyages bringing return cargoes of limestone from the wharfs at Knottingley, Brotherton and Warmsworth. The Trustees offered assurances that the new road would offer marked advantages over the existing Grange Moor turnpike. Evidently this latter had been important to Huddersfield lime merchants whose

<sup>16</sup> WYAS (Wakefield [W]), WRT8, Collected Papers of the Barnsley and Shepley Lane Head Turnpike.

<sup>17</sup> WYAS (W), WRT8.

customers had been travelling westwards to purchase their lime. The earliest available trade directory, that for 1822, lists two lime burners in the town, and later directories, through to 1866, continue to list at least one lime burner. In 1822 the firms were Clay Bradley at Aspley and Kaye & North (trustees of late J. Bottomley) at 'Lane'. Pigot's Directory of 1828 lists Bradley again, this time at Navigation Warehouse, [Aspley], and Joseph Bottomley at Leeds Road together with Joseph Goldthorpe at Colne Bridge.<sup>18</sup>

The Shepley Lane Head Trustees advised the Aire and Calder that the line of the new road would be 422 yards shorter than the Grange Moor turnpike, and much easier because it did not climb as high. The gradients would be nowhere more than one and three quarters in the yard and that only for 500 yards; 1482 yards would be dead level and 1977 yards nearly level. They added that 'a greater weight may be drawn by TWO horses than can be accomplished on the Grange Moor by THREE horses'.<sup>19</sup> It may be that the prediction of the new Turnpike Trust proved to be correct. Whether Clarkes' were able to meet the competition from Huddersfield either by price or quality cannot be known. The customer map of the Holmfirth area shows an impressive cluster, but perhaps this may give a misleading view of the Clarkes' success in competing with the Huddersfield producers. The sales records reveal a very large number of small purchases, and, as will be described later, many of the loads brought back westwards from Barnby were indeed quite small. In addition it should be remembered that the map summarises purchases over a long period of years. It may be that the operation of the kilns by Clarkes' was a relatively small business. We do not know how many of the kilns were rented by Clarkes'. Their workforce was not large: the 1841 Census records four heads of family at Barnby who were lime burners along with one of their sons, and another lived at Barugh Green, half a mile away. There was one other—evidently a part-time kiln worker—described as 'farmer and lime burner'. Other sources of information about the workforce are much less conclusive, but the numbers of limeburners recorded are small. The Cawthorne Parish Register of Baptisms records among the parents only one lime burner, a Thomas Burton in 1803, and in 1815 a Jonas Beaumont. One other, Joseph Walker, appears in 1819 and a John Beaumont in 1831. The 1806 Militia List for the Cawthorne Company in the Staincross Wapentake shows only one lime burner, John Burton, father of five (and described as 'poor'). There may have been others, however, as the Militia Lists only include men aged between 18 and 45.<sup>20</sup>

At Barnby Clarkes' produced lime in two forms: 'land lime' and 'building lime', as they termed them. Land lime was slaked at the kiln site to form hydrated lime. Building lime was sold as 'quicklime', as it makes better lime mortar if slaked at the

<sup>18</sup> J. Pigot & Co, *National and Commercial Directory for 1828-29* (London, [1828]), p. 957; also William White, *Directory of Leeds and the Clothing Districts of Yorkshire* (Sheffield, 1847), p. 505.

<sup>19</sup> WYAS (W), C 299, Collected Papers relating to the Aire & Calder Navigation.

<sup>20</sup> 'The Militia Men of the Barnsley District, 1806': an analysis of the Staincross militia returns' prepared by the Names Group, University of Sheffield (1998), pp. 29-33. Copy in Barnsley Archive Collection [BAC].



building site shortly before use. This lively substance – quicklime – would need to be stored under cover at Barnby, as it could absorb atmospheric moisture or rainwater, or even carbon dioxide from the atmosphere and thus become hydrated lime. The number of customers calling at Clarkes' varied from day to day, numbering between one and fourteen generally. It may be that output could be varied to meet major fluctuations in the market by using kilns of various sizes. Figure 6 illustrates the contrasting sizes of the surviving kilns, though whether these were the actual ones rented by Clarkes' is not known. The Records show that lime of both kinds was supplied to customers in sacks, the accounts listing sales under two heads: 'Sacks' and 'Dozens of Sacks'. Most customers took less than a dozen, and loads of four or as few as two were common.<sup>21</sup>

According to Teasdale, 'farmers came from far and wide' to buy lime from Jonas Clarke.<sup>22</sup> This would refer to the period between 1814 and 1822. From 1829, when the records begin, farmers (and others) continued to come in to obtain lime. Who it was who called to collect the lime is recorded in the Lime works Ledgers for the majority of entries.<sup>23</sup> In most cases it was the farmer or his son. In one exceptional case, however, an Ingbirchworth farmer, George Bower, collected for another – Thomas Halls of Thurlstone – on eleven occasions during the winter and spring of 1853, making separate journeys on his own behalf on other days. Some of the carters may have been farmhands, but several farmers evidently hired them to make the journey for them. One such was William Pickering, who was described in Census returns as a basket maker, living in Staincross. A William Wagstaff and a John Barraclough were among others. If Clarkes' themselves employed carters to deliver to customers they are not identified as such. The charts on Figure 5 illustrate the pattern of journeys made by a selection of Clarkes' customers. The Ledgers show that there were long gaps between purchases by most customers – longer than would be explained by the different seasonal needs of a farmer. These gaps may well represent periods when alternative suppliers were used: Thorpe at Barnby, for example, or the Huddersfield limeburners.

As noted earlier, turnpike roads influenced the pattern of customer locations. Yet progress with a loaded cart would be slow, even on these improved surfaces, especially when traversing steep gradients of which there were plenty on most of the journeys to and from Barnby. The toll charges for the Shepley Lane Head Turnpike are quoted specifically for different widths of wheel. The mention of wheels of four and a half and six inches describes sturdy wheels indeed, able to cope with heavy loads but not designed for speed. The tolls in 1823 specified: 'Cart with wheels under 4½ inches wide – 8d. Wheels 4½ inches wide but less than 6 inches – 6d. Wheels of smaller sizes – 5d.'<sup>24</sup> The need for three horses to pull a cart, even on a turnpike (the Grange Moor) has been mentioned earlier. The longest return journey among those found in the Clarke Records, that between Meltham and Barnby, would

<sup>21</sup> SA, CR 59-61.

<sup>22</sup> JGA. G. H. Teasdale: 'History of Silkstone coal and coalpits' (typescript, 1901).

<sup>23</sup> SA, CR 59-61.

<sup>24</sup> WYAS (W), WRT8.

Fig. 5. Patterns of lime sales from Clarkes' kilns

Bretton Hall									
	1843	1844	1845	1846	1847	1848	1849	1850	1851
Jan									BB
Feb									BB
Mar	B								BB
Apr									BBB
May									BBBB
Jun									B
Jul									B
Aug									BBB
Sept									B
Oct			B						B
Nov			B			B			BB
Dec									BBB

Maythorne: Joshua Hardy			
	1849	1850	1851
Jan			
Feb			LLLLL
Mar			LLL
Apr			
May			LLLLBB
Jun			
Jul		LL	
Aug	LLL		
Sept			
Oct			
Nov			
Dec			

Ecklands: Jane Wade						
	1851	1852	1853	1854	1855	1856
Jan						
Feb						
Mar		L				
Apr						
May						
Jun						
Jul					L	
Aug	LLL					
Sept					L	
Oct					L	
Nov					L	
Dec						

Hugsett: George Hinchliff									
	1843	1844	1845	1846	1847	1848	1849	1850	1851
Jan									
Feb									
Mar			L			LL	L	LLL	
Apr	LLLL	L							
May		LL		LLL		L			
Jun		LL							
Jul		LLL					LL		
Aug	L			LLLL	LL	LLL	LL	LL	LL
Sept			L	L		L	LLL	LL	L
Oct	L			L					
Nov									
Dec									

L = at least one sale of land lime.      B = at least one sale of building lime

At least one sale transaction of lime by Clarkes' at Barnby Basin, 1843-1860																		
	1843	1844	1845	1846	1847	1848	1849	1850	1851	1852	1853	1854	1855	1856	1857	1858	1859	1860
Jan		X	X	X	X				X					X				
Feb			X				X	X	X				X					
Mar	X		X	X		X	X	X	X	X				X				
Apr	X	X	X				X	X	X	X		X			X			
May	X	X	X	X	X	X	X	X	X	X		X		X				
Jun	X	X	X	X	X	X	X	X	X	X		X						
Jul	X	X	X	X		X	X		X	X		X	X					
Aug	X	X	X	X	X	X	X	X	X	X		X						X
Sept	X	X	X	X		X	X	X	X	X		X	X	X				X
Oct	X	X	X	X	X	X			X	X			X	X				
Nov	X		X	X	X	X		X	X	X	X		X	X				
Dec	X				X		X	X	X					X				

Fig. 5. Patterns of Sales from Clarkes' lime kilns



cover around thirty miles, with a steep climb out of the Holme valley going eastwards even with the advantage of the Shepley Lane Head road for a great part of the journey. On most journeys the steep gradients and poor surfaces of township roads and local lanes may account for the repeated journeys, a good many of them made on consecutive days, and carrying remarkably small loads. Among the examples of this can be mentioned the journeys made by William Marsh of Penistone in 1829, visiting Barnby on 30 January, and 2, 3, 4, 5 and 6 February carrying only seven sacks of lime on each journey. Thomas Webster, an Oxspring farmer, visited Barnby in 1851 on each of 3, 7, 12, 13, and 14 May and also on 14, 16, and 17 June, carrying only four sacks on each occasion.<sup>25</sup> One wonders if some of these journeys included convenient calls at Penistone market too.

It may be that some of the customers could make their journey more profitable by carrying a payload on the eastward leg, such as agricultural produce. This certainly featured among cargoes loaded at the Basin, and stone was another. Numerous quarries had been opened in the broad area between the Shepley Lane Head and Saltersbrook Turnpikes, many of them in response to the demand for stone to wall the new enclosures, but there were some that produced quality building stone, worth carrying over the miles to the basin at Barnby. The Geological Survey Memoir which covers this area describes quarries on Cartworth Moor, including the 'famous' one called Magnum Bonum. This quarry, in the Rough Rock beds, produced flagstones. Another, near the Sovereign Inn on the Shepley Lane Head Turnpike, working the Greenmoor Rock, produced 'the most beautiful and valuable stone in the Yorkshire Coal Measures fine-grained, a pleasant blue-grey, and in demand for mullions, sills and monumental slabs.'<sup>26</sup> Several of Clarkes' customers were located in the Cartworth area, and indeed, Magnum Bonum itself actually appears in the lime sale Records. However, there is no documentary evidence to support this suggestion.

Some of the major customers for 'building lime' were mentioned earlier, Bretton Hall being notable among them for its purchase of lime in quantity in every month throughout 1851 (Fig.5). As for other markets, the area westward from Barnby contained numerous small villages and scattered farmsteads but no large towns. Only a few miles away to the east, however, lay Barnsley, which was experiencing a series of building booms in the first few decades of the nineteenth century. This was due to the rapid expansion there of the linen industry, based upon handloom weavers until steam-based mills appeared in the 1840s. A very large number of cottages were built, most containing loom shops, the total of dwellings in the town doubling from 5,000 in 1811 to 10,000 in 1831. However, the limekilns at Old Mill, and perhaps the kilns at Barugh Locks, appear to have captured the market in Barnsley for building lime, at least as far as Clarkes' were concerned. At Old Mill there were two lime-burning firms, one of them owned by a Thomas Balguy who also operated a builders' yard. Balguy features prominently among the builders who invested in weavers' cottages in the expanding area on the south side of the town. Another of the rapidly growing

<sup>25</sup> SA. CR 61.

<sup>26</sup> C. E. N. Bromehead and others, *The Geology of the Country around Holmfirth and Glossop*, in *Memoirs of the Geological Survey, England and Wales* (London, 1933), pp. 178-9.



areas of weavers' cottages – Worsbrough Common – was located very close to the limekilns on the terminal basin of the Dearne and Dove branch canal at Worsbrough.<sup>27</sup>

The matter of turnpike tolls for lime continued to exercise the minds of the Canal Company. Even as late as 1851 a letter from its Sandal office to the Shepley Lane Head Trust sought to offer a compromise which might favour the carriage of lime:

The Canal Company will reduce duties on limestone from the Calder to Barnby Basin five shillings per cargo of 60 tons and pro rata if the Trustees will reduce tolls on carts of lime from 6d to 4d per horse and narrow-wheeled cart and from 7d to 3d for broad-wheeled carts; to commence August 1st.<sup>28</sup>

The decision to make this approach may have been prompted by rumours that Thorpe intended to discontinue his use of the kilns. Furthermore, Robert Clarke's widow, now in charge of the family business, had actually given notice that unless some alterations were made to the turnpike tolls she would cease to use her kilns. At the time these two operators were between them using fourteen of the kilns. The Clarke Records show that lime sales cease in the year 1862, the year of Sarah Ann's death, but a new lessee decided to rent some of the kilns for a time.<sup>29</sup> In May 1866 William Ward, of the Manor House, Cawthorne, signed an agreement with the Aire and Calder Navigation Company (now lessees of the Barnsley Canal) to 'take all those kilns situate at Barnby Basin at a rental of £5 per annum'. In May 1867 Wood further informed the Aire and Calder that he had decided to 'give the kilns a trial'.<sup>30</sup>

By 1871 the upper section of the Barnsley Canal was reported to be 'old fashioned'; the locks at Barugh were 'leaky' in use.<sup>31</sup> Yet the Census of 1871 records seven vessels in the basin. However, no coal was coming down to the basin from Clarkes' colliery by this time.<sup>32</sup> Coal could now be moved from the colliery to Silkstone Common and thence by cart to the Sheffield – Manchester railway. The 'Woodhead' route had been completed in 1845 and Mrs. Clarke had used this route in January 1846, sending a load of coal to the railway at Oxspring to supply a customer on the other side of the Pennines at Tintwistle. By 1855 the branch line connecting Penistone with Barnsley had been completed as far as Silkstone Common, thus providing railway access all the way to the main line. Mrs. Clarke expected to save £12 a day on the transport costs of coal, and celebrated the new railway access by arranging a day of festivities for all her colliers and their families in the grounds of Noblethorpe Hall.<sup>33</sup>

Some kilns may have been in use at Barnby as late as 1871, despite the changes described above. The Census of that year records a Henry Hiles (born in Brotherton) residing at the basin, but he may have been living in retirement – if such a term can be applied at that period. No limeburners were mentioned in 1881, although Kelly's

<sup>27</sup> Harold Taylor, 'Wilson's Piece: handloom linen weavers of Barnsley and their cottages in the mid-nineteenth century' (unpublished manuscript, 2008).

<sup>28</sup> WYAS (W), WRT8.

<sup>29</sup> SA. CR 58.

<sup>30</sup> WYAS (W). C 299/1/8/3/7.

<sup>31</sup> Goodchild, 'The Silkstone Railway', p. 14.

<sup>32</sup> Teasdale, 'History of Silkstone coal and coalpits', p. 4.

<sup>33</sup> BAC, J. H. Burland, 'Annals of Barnsley and its environs, 1744-1864' vol. 3, entry for 1855.



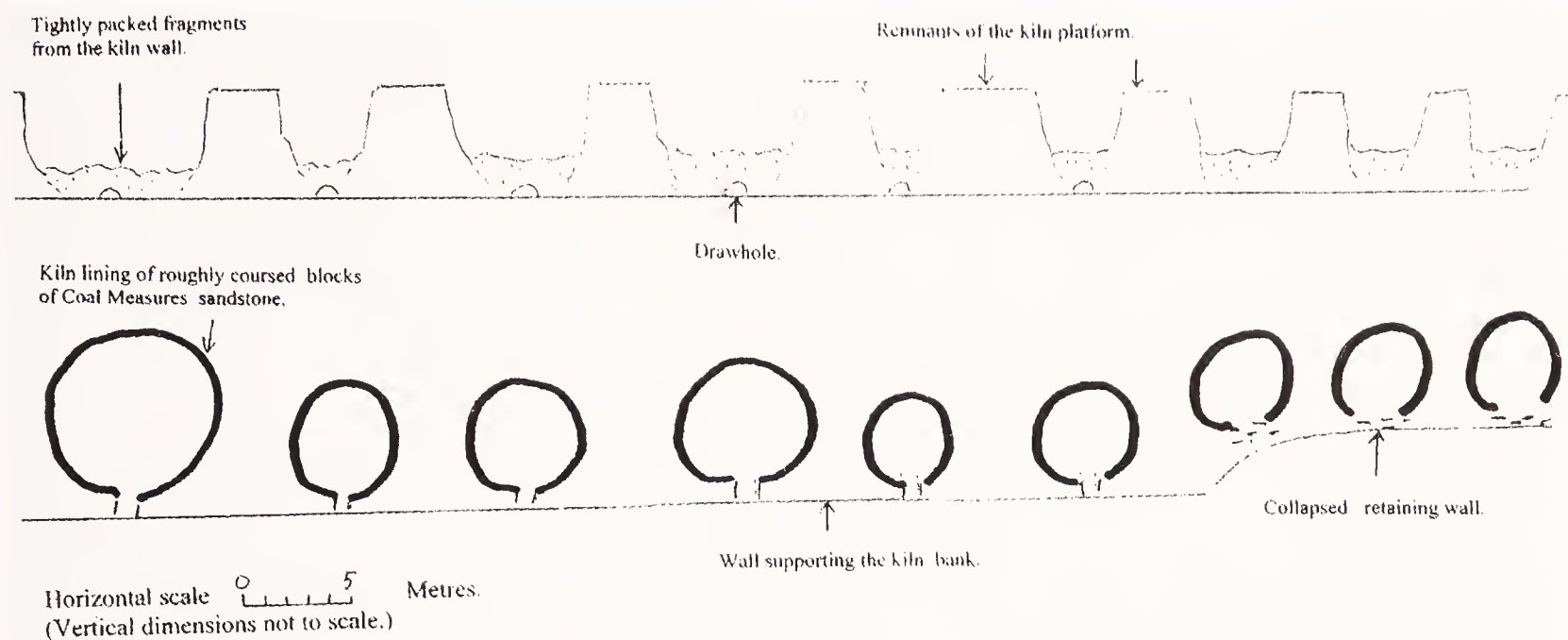


Fig. 6. Ruined Limekilns at Barnby Basin (surveyed by Harold Taylor and James Ritchie, 2006)

*Directory* for the area in 1882 lists 'Robert Coldwell Clarke, lime burner and merchant; Thomas Longmore, Lime Agent'. It may be, however that this entry merely repeated one which had appeared in an earlier year, this being a misleading feature of some trade directories.<sup>34</sup> The end of lime burning at Barnby does not seem to have been recorded: no record of sales by William Ward are available.

The cottage row remains as a prominent reminder of past activities in a community comprising about forty people in the 1840s, some of whom lived in these cottages. Some of the occupations were mentioned earlier. In the 1841 Census four households were headed by limeburners, one family including both father and son working in the kilns. A Joshua Jessop is described as 'lime burner and farmer'. There were also boat builders, one of them a boat builder/farmer, and a sawyer and carpenter who probably worked on boat building. Directly involved with the activities in the canal basin was a waterman. Three farmers and a labourer made up the community.

A tiny inn, the Jolly Sailor, attached to the warehouse, evidently provided a social centre for the local people and for the boat people staying overnight. It is rumoured that life was occasionally enlivened by bear-baiting on the small green outside the inn.

Barnby is now part of a quiet rural scene, where signs of the former busy industrial activities can easily be overlooked, apart from the cottage row. Some of the stones which formed the Canal Company's buildings are still on the site as part of the fabric of the newer roadside cottages.<sup>35</sup>

A great deal can be learned about the history of the site from the two large-scale Ordnance Survey maps, the first edition of 1850 (Fig.1) and the second edition published in 1891 (Fig.2). The first relates to the productive years of the kilns, the second to the time when lime production appears to have ceased. In 1850, four short

<sup>34</sup> Kelly, *Post Office Directory of the West Riding* (London, 1882), entry for Cawthorne.

<sup>35</sup> 1841 Population Census, Cawthorne. Barry Jackson, *Bear baiting in Cawthorne, 1790-1990* (Cawthorne Jubilee Museum, 1991), p.65.





Fig. 7. Kiln Drawhole partly covered by earth accumulated on the field side of the kiln bank. Masonry of retaining wall largely collapsed (Photo: Harold Taylor)

spurs link the terminal portion of the Silkstone Railway to the quayside at the Basin to facilitate the loading of coal into canal boats (or 'Billy Boys'). On the north-east side of the quay are ten kilns, conveniently placed to receive limestone unloaded from the canal. By 1891 (Fig.2) the railway track is no longer there. And there appear to have been changes in the number of kilns over the period, perhaps in response to changes in the demand for lime products. The map of 1850 also shows a row of eight and a smaller group of three kilns in the south-east side of the canal basin. By 1891 there are seen to be ten kilns in the main group, but the smaller group is no longer shown. Two kilns which had been built in the fields on the south side of the turnpike road, alongside another coal-carrying light railway, are also missing from the map of 1891.

A ground survey of the Barnby site carried out by the author in collaboration with James Ritchie, has revealed a number of inaccuracies in the details of the 1891 map. Whereas the map shows draw holes to only five of the line of kilns located on the north-west side of the basin, the largest one was also found to possess this feature. The fronts of the three small kilns at the south-western end of the row have disintegrated to such a degree that the draw holes have been destroyed. All these kilns would have needed draw holes for the removal of lime products, perhaps for raking out ashes, and for the admission of a draught of air sufficient to generate the required kiln temperature of up to 900°C. (Fig.7). There is further evidence that all these nine kilns had been used for lime-burning, as the internal walls of all nine, formed of irregular blocks of Coal Measures sandstone, show the effects of intense heat by their red colour and glazed surfaces. Tree growth has played a major part in the disintegration of the structures, and small fragments of the lining have



accumulated on the kiln floors, tightly packed and so preventing clearance to the actual bases in order to discover what arrangement was fitted to support the charge. There are kilns elsewhere in which an iron grill serves this purpose. The kilns were supported in a bank of earth, retained by a masonry wall on the field side, now in a ruined state (Fig.7) and topped with a pavement, little of which now survives.

The kilns are believed to have been charged with alternate layers of limestone fragments and coal or coke, known at the time as 'cinders'.<sup>36</sup> Slack coal, perhaps useful for the 'topping off' of charged kilns, features in the loads sent to Gagg's kilns at Knottingley, and the kilns at Barnby too would have provide a welcome outlet for this low grade fuel from Silkstone Colliery. Clarkes' operated coke ovens at the colliery near Silkstone village and another colliery proprietor, Popplewell, had a bank of nine coke ovens located on a short branch line from the Silkstone Railway, mid-way along the Silkstone valley.<sup>37</sup> A fragment of coke found on the floor of one of the kilns contained pieces of unchanged coal, perhaps representative of a relatively low grade product achieved in the local 'bee-hive' ovens. Limestone fragments were also found, the gas holes in some of them indicating their origin as part of the 'charge' in a last and incomplete firing of these kilns.

It may seem appropriate that the ruins of the kilns that have survived at Barnby, once located alongside a waterway which represented a major advance in transport technology in its day, now lie almost in the shadow of a modern, and very different equivalent—the M1 Motorway.

<sup>36</sup> D. Johnson, 'F. E. Hoffman and the invention of continuous kiln technology', *Industrial Archaeology Review* 24, no. 21 (November 2002).

<sup>37</sup> 'Survey of Highfield Farm, Silkstone in 1833' by J Mitchell; map in possession of Silkstone Primary School. An invoice for payment of tolls on the Silkstone railway, illustrating the role of 'slack coal' and of coke ('cinders') in the charging of the kilns, is in Teasdale, 'Silkstone Coal', p. 9. Some of these materials may have been destined for transport along the waterway to kilns at Brotherton, Knottingley or Warmsworth: APRIL: Slack: 1619 tons @ 9d. Coals: half a ton. Slack: 19 tons. Cinders: 13 wagons (59 tons) @ fourpence halfpenny. MAY: 693 wagons of coals. (1701 tons @ 9d.). 77 wagons of slack, 24 wagons of slack, six and a half wagons of cinders (61 tons) fourpence halfpenny.





## CLOGS IN THE WHEEL PIT: THE CLOGS FROM WOODLANDS MILL, STEETON

*By* Linzi Harvey

*Two wooden soled shoes with decorated clasps were recovered during historic building recording of the former Woodlands Mill in Steeton, West Yorkshire by Archaeological Consultancy and Research at the University of Sheffield (ARCUS). They were found in a small recess in a wall, 3 to 4 metres above ground level, within a wheel pit. With the wheel in place, it would have been impossible to access this alcove, indicating that these items are 'concealed shoes' (Swann 1996). The deliberate secretion of old shoes within buildings is not unusual. It is a long-established superstition, common in the seventeenth century and continuing into the twentieth, with a possible fourteenth century origin.*

*Shoes have been found concealed in buildings ranging from monasteries and stately homes to public houses and cottages, but according to Swann's 1996 study of over 1550 concealed shoes, only ten have come from factories or workhouses. Although recent archaeological survey at a cotton spinning mill in Manchester revealed two concealed shoes within the building complex, these finds are not commonly recovered in industrial settings.*

### ARCHAEOLOGICAL CONTEXT

Archaeological building recording works at the former Woodlands Mill in Steeton, Keighley, West Yorkshire (NGR SE 0320 4410) were undertaken by ARCUS in 2004. This included a photographic, drawn and written record of the five main standing buildings taken on-site prior to their redevelopment. Building recording surveys in commercial settings rarely require the collection or description of objects within the building. However, investigation of an alcove within a wheel pit revealed two wooden soled shoes with copper alloy clasps, which were unusual enough to warrant collection. This alcove, which may have originally supported a beam during the construction of the building, measured approximately 0.25 m by 0.25 m, and was raised around 3 to 4 metres above ground level. With the wheel in place, it would have been entirely inaccessible.

These clogs were recovered in the oldest of extant buildings on the site, called the Old Mill, which was built in the early 1830s as a worsted cloth spinning mill. The building, the major axis of which is aligned broadly east-west, was five storeys high in addition to an attic space. Incorporated within the building were two water-wheel houses, one to the east and the other to the west; both of which occupied different elevations. The wheel at the west end is the higher of the two, and it was from within the west facing wall of this structure that the clogs were retrieved.

Clogs were popular utilitarian items of clothing throughout the eighteenth, nineteenth and early twentieth centuries until rubber soled shoes became cheaper



and more easily available in the 1940s. They are often associated with workers in Yorkshire and Lancashire, although they were worn throughout the country by men, women and children engaged in heavy industry, agriculture and wet or hazardous environments.

## DESCRIPTION

### *The clogs*

On the basis of size, shape and style, it is likely that the two shoes form a functional pair (see Fig. 1). The size and decoration would indicate that these are probably women's clogs, equivalent to a modern UK size 5. The right shoe is complete, whilst the left is missing the toe area including part of the sole. They each have shaped wooden bases, and the right has 'horseshoe' type irons attached to the sole (see Fig. 2). These are commonly called 'cackers', 'calkers' or similar variations of this name. Handstitched leather uppers are attached to the wood by a strip of leather and ferrous nails. Traditionally, wooden clog bases made in the north of England are



Fig.1: Clogs from Woodlands Mill, with sample of associated laces in background.



made from alder, as it is light, straight grained, water-resistant and does not split.

### *The clasps*

A two-part brass clasp is positioned at the front of each shoe. In both right and left shoes, the decorative upper part of the clasp is on the right side of the shoe. The functional part of the clasp is on the left and when in use, would have been hidden by the upper part. This part has three parallel slots to allow tighter and looser fastening. On the right clog, the clasp is embossed with a small flower and radiating 'sun' motif (see Fig. 3). The left clog clasp is decorated with a centrally positioned stag (Fig. 4), bordered at the top and bottom by floral designs. The clasps themselves are of a typical traditional style, but are decorated in an unusual and particularly detailed manner (pers comm. Rebecca Shawcross). Interestingly, the functional parts of the clasps have been stamped with the same stag motif present on the decorative part of the clasp on the left shoe. It is possible therefore, that the upper part of the clasp on the right is a repair, since all other parts share the same design. This design may be associated with a particular maker.



Fig. 2: Right clog showing 'cackers' attached to wooden base.



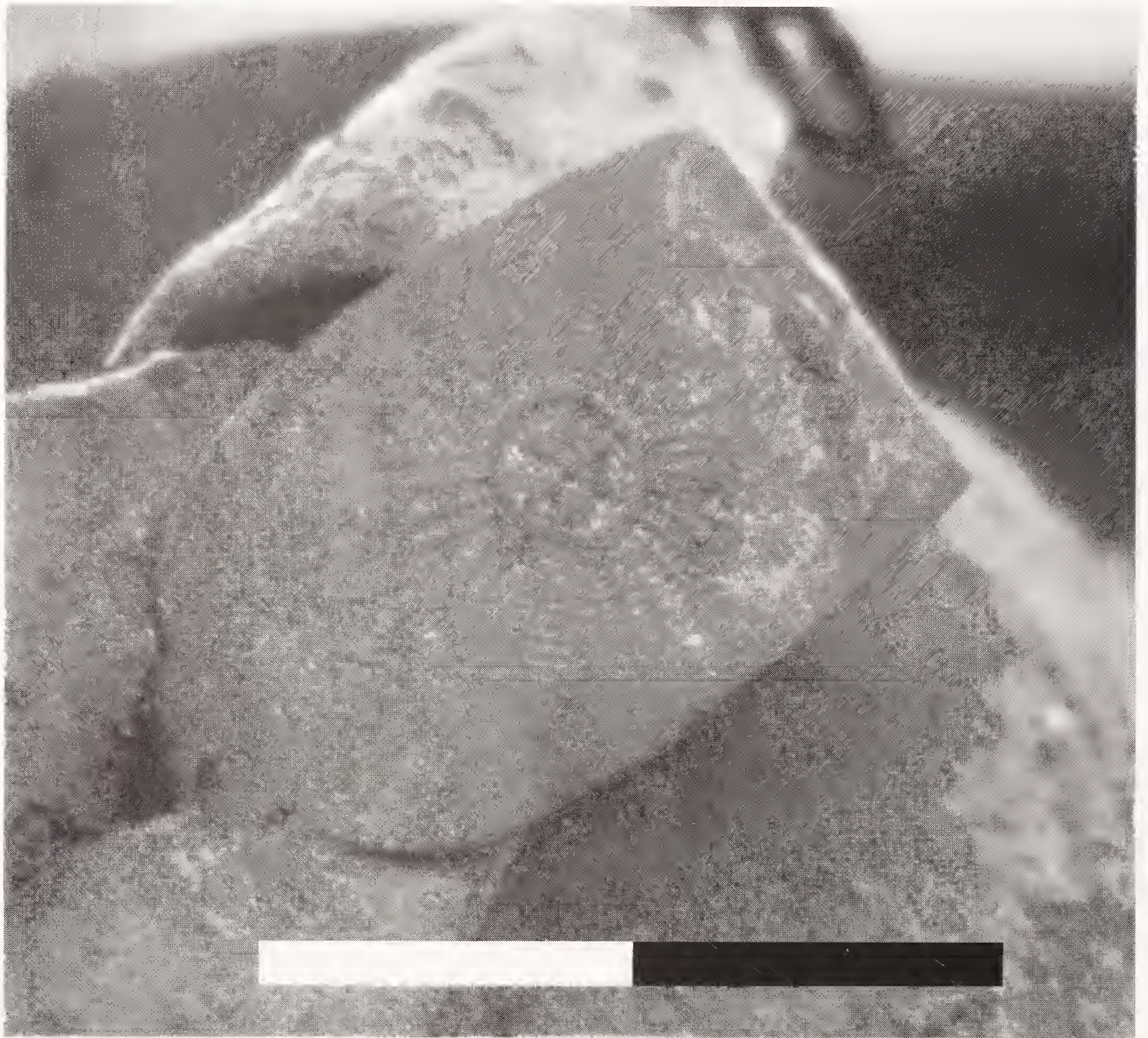


Fig. 3: Flower and 'sunburst' motif clasp from right clog.

### *Laces*

Lengths of thin sectioned and narrow leather laces were also recovered along with the clogs (see Fig. 1). Although they were associated with the shoes, with some of the lengths stuffed into the shoes, the clogs were fastened by the clasps alone. There appears to be no practical reason for the laces to be deposited with the clogs.

### *Concealed shoes*

Concealed shoes are often '...left somewhere normally inaccessible' (Miller & Wild 2007, 99). Such places can include within walls or fireplaces, under floorboards or in rafters. They are typically associated with warding off bad luck and lending protection to the building or its inhabitants (Merrifield 1987). This phenomenon was noted explicitly during the second half of the twentieth century by June Swann at Northampton Museum, and is part of a tradition of garment and other object concealment within buildings. It is thought to be the 'intimate' nature of shoes and



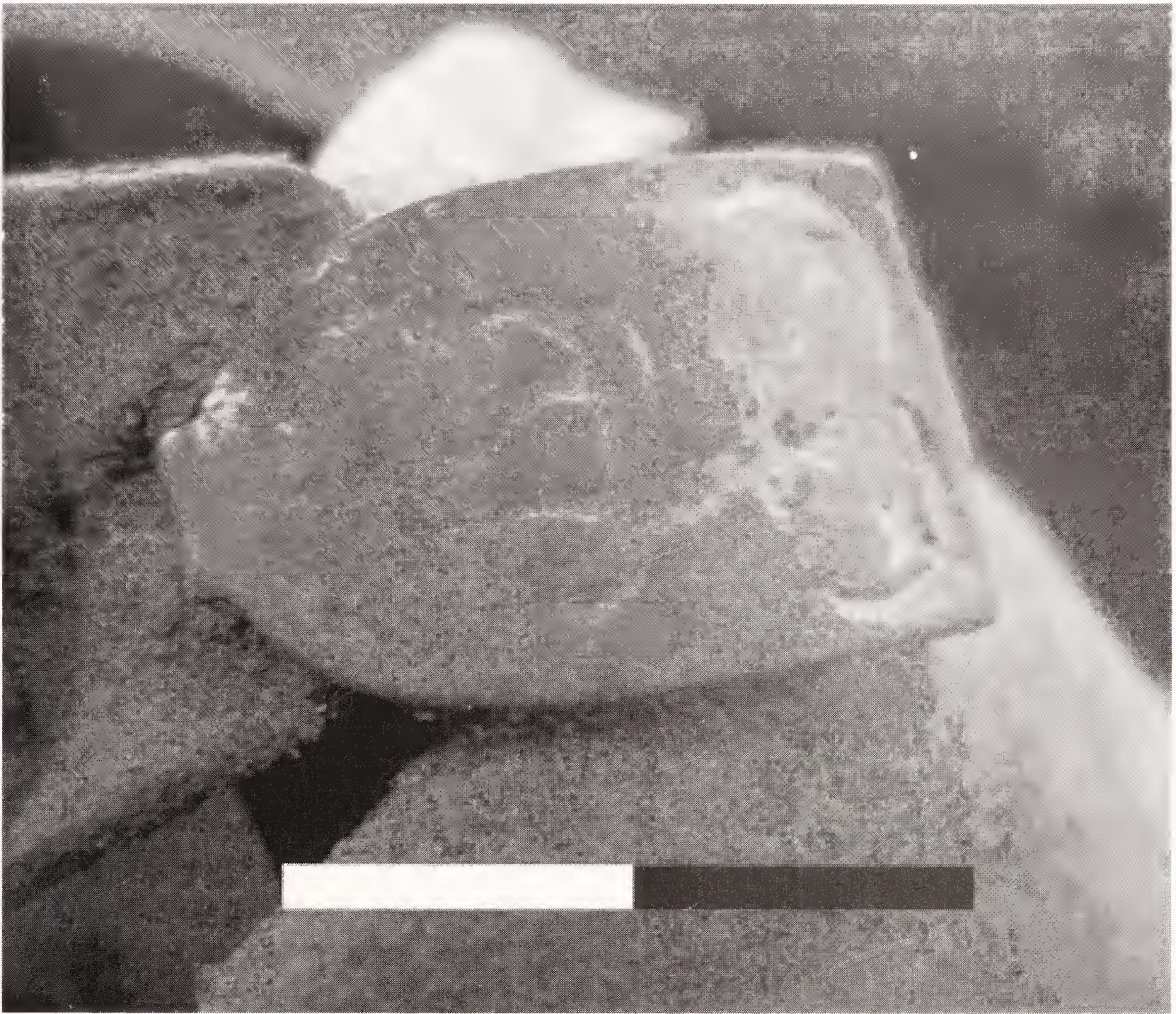


Fig. 4: Stag motif clasp, left clog.

the manner in which they preserve the character of the individual after the user has discarded them that make them the focus of 'folk magic' and superstition.

The Woodlands Mill clogs were intentionally placed in an inaccessible location, hidden from casual or accidental view. With the wheel in place, it would have been impossible to access this alcove without the removal of the wheel itself. The stylistic date of the clogs, around 1830 to 1840, would imply some degree of contemporaneity between the secretion of the clogs and the construction of the mill. The beam-sized alcove in which the shoes were placed is likely to have been a hole created during construction. There is some evidence that recesses such as these are used occasionally to deposit items. Volkan describes a seventeenth century Swiss shoe upper and a goat's foot example found in a 'scaffolding hole' (1998, 3) in the north wall of a chapel.

This example reinforces the relationship between concealed shoes and builders or other workers. It is possible that concealing shoes is therefore a male practice. Anecdotal evidence presented by Swann (1996) points to men as the primary participants in this procedure, quoting an individual who, as a child in the



mid-1930s, had seen his father and a workman handling a woman's boot whilst relaying a kitchen floor, in Norfolk. Interestingly, there is no historic documentary evidence to shed light on this kind of superstition. Whilst the 'learned men' of the seventeenth century documented many superstitious practices, shoe concealment was not one of them (Merrifield 1987, 133).

Interestingly, concealed shoes are often placed 'guarding danger points' (Swann 1998, 2) such as doors, windows and stairs. The clogs from Woodlands Mill could therefore have been meant as a talisman for good luck in the potentially hazardous environment of a working wool mill, with its large scale machinery and moving wheels. It is possible too that the clogs themselves relate to work at the mill, since they are hard wearing utilitarian shoes. Generally speaking however, there appears to be no pattern as to the type of shoe concealed and the nature of the building, since children's shoes have been found in monasteries and inappropriately showy women's shoes in cathedrals (Swann 1996).

Two shoes, including a ladies leather shoe or slipper were recovered from A & G Murray's Mill in Manchester, both of which were described as 'more than simple workaday shoe[s]' (Miller and Wild 2007, 167). The woman's shoe was concealed in roof space during a renovation in the early twentieth century, whilst the other, a child's shoe, had probably been concealed during construction in the early nineteenth. Although these examples were retrieved from a broadly similar industrial context, the differences are clear. The Woodlands Mill clogs are hard wearing in design, worn, likely repaired and were discovered as a pair.

It is typical for concealed shoes to be heavily worn and/or in some way damaged prior to concealment. Although neither shoe is greatly worn, it is possible the clasp of the right had been replaced or repaired. The damage towards to the toe of the left clog has removed the toe cap and part of the wooden base, may reflect accidental or intentional damage. Concealed shoes are often found in association with other garments or objects and in this case, the shoes were found with laces that could not have been functionally associated with the shoes themselves. Over 200 different types of object have been associated with hidden shoes including animals, clothing, coins and weights (Pitt 1998, 4) indicating that like the shoes deposited, the choice of other items was very personal. Determining the meaning behind the additional finds left with shoes is perhaps even more difficult than determining the meaning behind shoe concealment itself.

## CONCLUSION

Concealed shoes are most frequently found by individuals renovating private properties, which may in part explain the paucity of concealed shoes in factory or workplace settings. June Swann's 1996 study mentions just 'two workhouses [and] eight factories including a railway station...' from which such shoes have been recovered. Few industrial locations, such as mills, have been reported as containing concealed shoes to date. With the advent of commercial archaeology and building recording of upstanding properties however, it is possible more hidden shoes will be uncovered during survey.



The clogs from Woodlands Mill, Steeton add to a growing corpus of information regarding concealed shoes within buildings and have been registered with the Concealed Shoes Index at Northampton Museum. Whilst the practice of concealing objects for superstitious reasons may date to the fourteenth century, very little documentary information exists to explain them. It is this that makes the archaeological retrieval, description and publication of such finds so important.

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## SMALL PRINT: MEMORIES OF A FAMILY BUSINESS

*By* Brian Stevenson

*The essay on which the following piece is based was submitted for the Yorkshire Society's Bramley Prize in 2007. The judges thought that it provided an important personal account of an episode in Leeds history, and this edited version is now printed as a contribution to source material on the local economic history of Leeds over the past hundred years. It concerns the changing fortunes of a family business of printers and bookbinders, recalling old craft skills now becoming as remote a memory as the buildings in central Leeds where the firm once operated. Though the focus of this contribution is the family business, two sections are added, by way of explanation, on the basic techniques of machine ruling and of bookbinding which were central to the firm's activities.*

### THE BUSINESS:

#### W. STEVENSON AND SON, MANUFACTURING STATIONERS

The founder of the firm, William Stevenson, was born in 1869. He had two brothers, Harold and Roland, and a sister named Maude. Around 1895 he was married to Eleanor and they had two children, Doris and my father, Cecil, born in 1898 and named after the hero of the Empire, Cecil Rhodes. In the same year 'W. Stevenson and Son, Manufacturing Stationers' was established and endured for almost a century. I don't know how William Stevenson first became involved in this line of business but in the beginning I suppose things would have started in a small way, with William's wife, Eleanor, helping with the work. Most of the business consisted of trade machine ruling and bookbinding for the many small printers and stationers existing in Leeds and district at that time. In addition, the expanding education system was creating a demand for various kinds of educational stationery that were all British made.

By 1912 the firm had progressed and was established at King Charles Croft in central Leeds. The street is still there but the surrounding buildings have been developed several times over. The firm's Works Book, dated 1912, records the names and the ages of all the young apprentices and half-timers employed at that time. The Education Act of 1902 had raised the school leaving age to twelve years, but it was the practice to allow children of thirteen and fourteen to work part-time and it wasn't until 1918 that the leaving age was officially raised to fourteen. Each young person employed had a certificate signed by the Leeds Education Officer, James Graham, confirming their age and the number of hours that they were permitted to work. Sadly, many of the boys on the register would become casualties in the coming Great War. The Works Book also recorded things like the dates and times of the compulsory lime washing of the premises and who carried out the work, plus any accident reports and safety inspections.

Some time after the Great War the firm moved into more spacious and convenient premises on the first floor of a factory along Water Lane just outside the city centre, near the river Aire as the name suggests. The building was owned by the large engineering firm of Crabtrees, later Crabtree-Vickers, who made printing machinery, and we were destined to remain there until 1941. In actual fact we would have been wiser to try to buy our own premises at this stage because the business was prospering, but the location at Water Lane was convenient and the layout efficient with everything on one floor. Better still, the ice-cream factory of the Leeds Industrial Co-operative Society was situated just next door, giving a reliable supply of 'Licks' ice cream. The ice cream used to be made in flat slabs coloured pink and white.

We used to have a works cat at Water Lane called Bunty. Its fur was black and white and it used to be fed on choice meat and fish. In fact, sometimes there seemed to be more concern about the cat's dinner than about serious business matters. 'Are you sure that you've got the meat for the cat, Doris?', William Stevenson would enquire anxiously as they left the house for work. Some of the staff thought that Bunty was more trouble than she was worth. She did manage to catch a few mice, but she also had the annoying habit of clawing the cotton cords on the ruling machines, pulling down all the cords completely, as if she'd been trying to play the harp. At night her favourite bed was on the felt blankets that carried the sheets of paper through the ruling machines. When the machines were started up in the morning and the blankets started to move, Bunty would leap out from under the machine like a rocket. It was a miracle that she wasn't caught up by the rollers and squashed flat, but luckily the machine she favoured didn't move very quickly so she always escaped unharmed. and lived happily at Water Lane for many years until she died of old age just before we left the building.

After the Second Word War started in 1939 our landlords, Crabtrees, switched from the manufacture of printing machinery to war production, which included— so we were told —making tanks. As the war progressed into 1941 the situation got worse and the war effort became an absolute priority. Out of the blue Crabtrees suddenly gave us three weeks' notice to leave the Water Lane factory, which was needed for essential war-work. It was difficult to find another workshop at such short notice, but there were some vacant premises owned by the railway company at a warehouse on Neville Street near the station in central Leeds. It must have been very difficult to move all the heavy machinery, such as guillotines, in such a short time, even with the help of printers' engineers. In addition, the ruling machines had to be dismantled and their blankets and cords removed, but somehow it was all done in time.

The new accommodation consisted of a second storey workshop facing Neville Street with two more floors joined on behind at right angles. The street entrance led up a flight of steps to a large room with a loading bay at one side. The guillotine and packing tables were installed here and a door to the right led on to the rest of the works. The Co-op coal depot with its coal wagons, cart horses and the jetty where barges used to unload was just across the street, so the atmosphere around the works wasn't exactly pure with all the coal dust. Also, the premises were situated a little too near the station, which could become a target for enemy action. Yet in spite of all these concerns the firm was destined to remain there until 1956.



From the bookbinding department you had a bird's eye view of Neville Street with its traffic of trams, buses, coal carts and cars. Horses were still in use to pull the carts at this time. We started work at 7.45 and half an hour later crowds of office workers transported by bus from places like Halifax, Dewsbury and Batley used to flock down Neville Street on their way to work. We had a tea break at ten in the morning and another one at three in the afternoon, finishing work at four-thirty. At this time there was a forty-two hour five-day week with half an hour for lunch. There was no canteen but there were cookers to heat up food like jacket potatoes or tins of beans, and every Friday an order was sent out to the local fish and chip shop. Apart from this there was a 'greasy spoon' café just across the road called 'Pop's Tea Shop', patronised by the coalmen, where you could buy mugs of tea, pies, sandwiches and cakes from Bray's bakery. We had radios in the works, but the music was limited to certain programmes like 'Housewives Choice' or 'Music While You Work'. On this programme a different band or orchestra like Jack White, 'Trois and his Mandoleers' or Joe Loss used to play every morning or afternoon. Just before a holiday there would be a special kind of concert when regional tunes from around the country, like 'Blaydon Races', 'Ilkley Moor', 'A Lassie from Lancashire' and 'A Yorkshire Girl', were played in a cheerful, festive manner.

The firm was what was known as a 'Union Shop' and usually had about twenty-five people on the staff, and some stayed with us for many years. Just after the Second World War we installed the latest fluorescent lights, making the workshop look really modern. A little later we acquired a new guillotine from Italy, called a Pivano. This machine was so heavy that it needed a special crane to lift it into the works, the whole process holding up the trams and the traffic on the main road. Apart from limited access, the premises at Neville Street were very convenient until changed circumstances forced another move. In actual fact we wouldn't have been able to stay there much longer because modernising developments were being planned all around and today not one building of that era remains along Neville Street. The occupants of today's towering office blocks, luxury apartments, penthouses and hotels would be amazed if they knew that their space was once filled by busy machinery, skilled production and busy workers. Perhaps a faint echo from the past is sometimes heard in these luxurious places, like the low chattering of a wire stitcher, the thump of a guillotine, the ghostly whirring and clicking of a ruling machine or the faint sounds of 'Music While You Work' as played in 1954.

Our next move, to premises near the bridge over the river Aire on South Accommodation Road, didn't turn out very well. The building was the largest one we had ever occupied and the idea was that we would eventually buy it. There was a spacious ground floor all on one level and a basement below with easy access. If we could sub-let this basement it might have been possible to buy the whole place. At first everything seemed to go well and we managed to sub-let the basement to nearby West Yorkshire Foundries for the storage of firebricks and other materials. Unfortunately, the overheads here turned out to be much higher than expected and the place was difficult to heat. The original coke stoves were dirty and inconvenient and hopelessly inadequate to heat such a large space. On one occasion these stoves actually set fire to the roof of the building, luckily when we were there. We managed



to put out the fire with extinguishers, but in retrospect it might have been better to let the place burn down. After this we put in gas heaters which were more effective, cleaner and safer. Then after a time some of the heavier machines kept breaking down and it was discovered that the wooden floors weren't rigid enough to support their weight properly. In an effort to improve conditions we tried to install a false ceiling with wooden planks and sheets of plastic. We bought platform scaffolding and spent many hours laying planks of wood across the iron girders of the roof and stretching large plastic sheets between them, all this being done at evenings and weekends in our own time. The result wasn't really effective but it did probably help to raise the temperature in the works slightly during the winter months. In the end it was all in vain, because when we finally had to vacate the premises the false roof was torn down and the cost charged to us.

Another blow fell when we lost the sub-letting money from West Yorkshire Foundries. Then came the terrible winter of 1963 when literally everything froze solid. There wasn't the weight of snow experienced in 1947 but the intense cold was freakish and penetrating. Our staff was incredibly patient under very uncomfortable conditions at this time. I used to go down to the works on dark cold Sunday evenings to turn on the gas heaters to make things a bit more comfortable the following morning. Fuel bills became astronomical, increasing the overhead expenses still further. In the end it became obvious that we couldn't go on like this for much longer, so we began to look for new premises in 1964.

At about this time the Thorp Arch Industrial Estate at Wetherby, the Government wartime ammunition depot, had been returned to private ownership. The new owners were keen to attract new businesses to the vast estate and were offering very favourable rental terms. This seemed like an excellent opportunity so the firm took the risk of re-locating to an entirely different district outside Leeds city. The building we got seemed ideal for what we wanted, just the right size with a solid concrete floor and easily heated with a new industrial oil heater. Of course, the biggest obstacle was the distance from Leeds in regard to business and staff. We did get some local business to compensate for the work lost when we left the city and in general the advantages outweighed the disadvantages. The situation regarding staff was more difficult. A mini-bus was laid on to bring people out from Leeds. At first everything had a novelty value and the old staff came out to see what things were like at the new premises. Unfortunately, very soon, when the weather worsened and the days got shorter, the travelling distance to Thorp Arch became too tedious. The old staff began to leave for more convenient jobs nearer home and we had to recruit local people to fill the gaps. However, compared to South Accommodation Road, working conditions were far superior at Thorp Arch and we had the use of the canteen of George A. Moores, the big prepared-joinery manufacturers established on the estate. It was pleasant to work in green surroundings amidst fields, brambles and even apple trees. The apple trees had sprouted from cores discarded by the original war-workers.

The firm tried to diversify, installing a flat-bed letterpress printing machine so we could print exercise-book covers ourselves and do numbering work. We did a lot of numbered duplicate books and in 1964 produced all the exercise books for Leeds



Education Committee. We must have been at Thorp Arch about three years when I was offered a place at a College of Education for mature students. It was too great an opportunity to be missed, so very regretfully I left the firm in the mid sixties and embarked on an entirely different career. The business continued for another twenty-five years until tragic circumstances intervened. My elder brother, who had been managing the business, sadly died in 1989 and there appeared to be no-one else who could take his place. After this things seemed to deteriorate with less business, leading to short-time working.

Some of our traditional work disappeared as other businesses and industries declined or changed. One of our best customers used to be a firm called W. H. Bean, booksellers, of Lower Basinghall Street near City Square, an area now absorbed into the Bond Street Precinct. W. H. Bean was founded in 1750 and must have been one of the oldest firms in the city. They sold all kinds of textbooks, technical manuals and even times-table books to schools and colleges, but even in the mid-fifties they used to complain that this side of their business didn't really pay well. A much more profitable side supplied exercise books and scholastic stationery to customers all over the country and especially in Northern Ireland. Inevitably, huge building developments in Leeds city centre forced Beans to move out to new premises along the Leeds Ring Road at Seacroft. Then around the seventies trading conditions became more difficult. The Local Authorities began to import exercise books and stationery from places all over the world like India and Brazil. Less money was spent with local firms and even the big Leeds educational stationery firm of E. J. Arnold was affected and had to close down many of its operations. The business of W. H. Bean also declined and eventually they had to cease trading after an existence of over two hundred years.

One of our big stationery jobs was making account books for the Star cinema group. At that time in the early fifties nearly every town had one or two cinemas, and every Star cinema had its own individual account book. The name of the cinema and the town were gold blocked on the front cover of each book. The group had at least fifty cinemas scattered around northern England and there were places like the Star at Gainsborough or the Roxy at Worksop, for example. By the end of the decade television had taken its toll and most of these cinemas closed down to become bingo halls or shops and offices.

At about the same time things in the printing industry were also beginning to change. Small offset litho machines like the Gestetner and the Roneo were comparatively easy to operate and business firms began to do their own printing. You didn't have to pay purchase tax on printing if you did your own work, which was a big incentive. The process was much more efficient than the old letterpress methods where you had to set the type and perhaps put the job on a Heidelberg platen. New computer technology and self-publishing then finally killed off the old-fashioned letterpress process.

It was perhaps the increase in knowledge and ideas caused by the gradual expansion of the education system that brought about improvements and change, leading to innovations and greater opportunities in different fields and a decline in traditional activities like letterpress printing. Some firms managed to adapt to changing conditions. The firm working beneath us in Neville Street was called Whitakers and they



repaired linotype and monotype hot-metal typesetting machines. When new technology started to come in they switched to making litho plates and were very successful. But for us the changes had taken their toll and by the early nineties the staff had dwindled to a nucleus of former times. The overheads and expenses became too much for the existing business to support. When our firm first went to Thorp Arch the rent had been very low, but when the time came to renew the ten-year lease on the property the price went up considerably. Finally, after another passage of time, the rent was much greater still. Sadly the firm had to stop trading and a proud tradition came to an end. The machinery was all sold and sent to South Africa. Perhaps if the firm had owned its own premises or had adapted to changed conditions it would have been possible to keep going. Who knows?

### A FORGOTTEN CRAFT

Usually no one gives a second thought to the lines ruled in exercise books or on notepaper, yet not so very long ago mechanical machine ruling was a significant branch of the printing industry. Only two firms in this country, John Shaw and Waite & Sheard, made ruling machines and both firms were located at Honley near Huddersfield. Around 1820 John Shaw of Huddersfield invented a new way of printing sheets of paper which were suitable for writing down notes of music when composing a tune. Sheets of blank paper were carried through a machine by cotton threads, or cords as they became known, and an impression of parallel lines was obtained with inked wires. From this crude beginning a machine using brass pens was developed. The machine consisted of a wooden framework and individual brass pens were fixed by hand in a kind of broad carriage set across the width of the machine. To say that this work was slow and fiddly would be a vast understatement. The ruling ink was then transferred from a strip of flannel placed on the carriage to each individual pen by means of strands of wool. The quality of work depended entirely on the skill of the ruler setting the pens and applying the ink. Each pen had to be set carefully to give the same width of line and the flannel skilfully inked with a brush. Too much ink could lead to a 'blind' double line resulting in hours of drudgery trying to bleach out the mistake.

Eventually a new machine was invented which ruled lines by an entirely different method. This machine used brass discs and aluminium spacers all slotted on to a metal rod and locked into position with special screws. The discs and spaces were first positioned in a 'v'-shaped trough and set to a pattern that was usually another piece of ruled paper. When the discs seemed to match the pattern, everything was transferred to the metal rod and locked into position. In this process the discs transferred the ink to the paper from rubber rollers. Long strips of special cloth carried the ink to the rollers from metal reservoirs. A numbering system was used to classify the thickness of these discs and spaces. The number three disc was the one most commonly used for exercise books, the number two disc was much thinner and not used very much. The number six space was the one most commonly used for routine work. We made things simpler by colour-coding the spaces with paint to help with the setting and then the distribution after completing a job.

The actual ruling ink came in the form of powder contained in square tins from



the firm of Pointings of Hexham in Northumberland. We made vast quantities of blue feint ink and stored it in buckets ready for use. Apart from the commonly-used blue feint, there were also red, green, black, yellow and even violet coloured ink powders. Sometimes the ink needed additives to suite different kinds of papers or conditions. For example, the addition of ox gall made the ink flow better on the hard sized papers used for account books, and methylated spirits helped ink to dry quicker, preventing 'set-off' from the blanket.

At the end of the working day the ruling inks inevitably stained your hands and the only way to remove these stains was by dipping your fingers into diluted bleach. This made your hands feel slimy and what it did to the skin doesn't bear thinking about. However, this wasn't as bad as what happened in the bookbinding department. Here, to prevent sticky fingers covered with glue from marking the work, it was necessary to wipe your hands frequently with a rag dipped into the hot water inside the glue-pots. Unfortunately, any paper cuts, or burns left by hot tools used for working leather, turned septic, leading to blood poisoning from the contaminated rags, and so to hospital treatment. The paper stock to be ruled varied from tissue-like onion skin - almost impossible to handle - to very thick card. Indeed, at one time we even ruled plywood, but more of this later. Sometimes the automatic feeders on the ruling machines couldn't handle the extremes of stock and this kind of material had to be hand-fed. Then things could become really mind-bending and you had to let your mind wander to keep sane. The old-fashioned pen machines needed two operators, a ruler and a feeder. Skill in feeding the paper was crucial. Too much space left between the sheets would cause set-off from the blanket. In stop work the feeder had to hit the gate on the machine. At the worst a badly-fed sheet could crumple up, tearing down the cords and ruining the setting of the pens. Most small jobs, such as a single account book, needed only about 125 sheets of paper, which would be hand-fed. It was possible to operate a disc machine single-handed if you kept an eye on the red headlines to make sure that they didn't go 'blind'. Even so, it could get very boring feeding sheet after sheet of paper for any length of time. There are 480 sheets of paper in a ream and this would take about twenty minutes to feed through the machine. Then you had to rule the other side. We once had a job at Thorp Arch which involved ruling plywood and cutting it into thin pieces called bizada board strips. This was before the days of the computer and I believe that the strips were used in the accounting system of some government department. We were probably one of the few firms in the country who could do this kind of work and the job paid very well whilst it lasted. However, it was very difficult to set a ruling machine to accept the plywood, which then had to cut up very carefully into tiny strips.

Pen machines were still operating at the end of the Second World War because there was still a lot of trade work and stationery ruling to keep the machines busy. In 1947 in the ruling department at Neville Street there were two hand-fed pen machines, two hand-fed single-sider disc machines and an automatically-fed disc ruling machine. Downstairs in the scholastic department there were two big double-sider (ruling both sides at once) automatic feed disc ruling machines plus ancillary equipment, like sewing machines and wire-stitchers for making exercise books and educational stationery.



By the time we had moved to Thorp Arch in 1964 the last of the pen machines had been abandoned. The day of the pen machine with its feeder, craftsman ruler and fiddly brass pens was over and today the craft is almost forgotten. Over the years we still kept in touch with the ruling machine manufacturers, John Shaw of Honley, and they sometimes sent their customers to us to see our machines in production. One day a group of people from Sudan in Africa arrived to observe our techniques. We talked to them for some time and were surprised to learn that they used manual labour to work the machinery. In their country it was cheaper to employ someone to turn a handle than to use electricity. It all sounded like drudgery and much worse than hand-feeding paper.

Some time later in the mid sixties the son of the Managing Director of Shaws, also called John Shaw, visited us at Thorp Arch to learn all about machine ruling. He stayed with us for several months making the long journey from Honley by car every morning. Even at that time he said that nearly all their ruling machines were being exported and that demand in Britain was weak. He worked with us until the end of 1967 and it would be interesting to know if his firm managed to adapt to modern conditions. I don't know about the fate of the disc ruling machines, but when one of the last machine-rulers in Leeds retired some years ago the remaining equipment was offered to the local Armley Industrial Museum. Sadly, the offer was turned down and anything left was scrapped.

## BOOKBINDING MEMORIES

For many years bookbinding used to be an important part of the business. Craft bookbinding itself is a highly skilled occupation that takes years to master – things like gold blocking, gilt edging, hand tooling and marbling, to name a few of the skills that are rarely seen today. The old time craftsmen used to have their own trade secrets and recipes that they jealously kept to themselves as closely guarded knowledge.

The term bookbinding covers a variety of activities ranging from skilled craft work to simple machine binding. Craft bookbinding is very interesting, but didn't ever make much money because of the expensive materials necessary and high labour costs. Today, possibly only places like the British Library or Oxford University would have the resources needed for such labour intensive work. During the nineteen fifties and sixties our machine bookbinding department used to produce thousands of quarter-bound books for schools and commercial customers. A quarter-bound book was machine sewn, had pieces of glued straw board quickly slapped on each side, a piece of book cloth hastily stuck along the spine, covered with fancy paper and pressed before being trimmed. For this kind of work we used a large glueing machine with a cylinder on top for glueing boards. The machine gobbled up vast quantities of solid cake glue, which was delivered in heavy cardboard cases. The blocks of glue would be carved up into convenient chunks and fed into the machine to melt in a kind of glue reservoir. Sometimes the machine malfunctioned, especially if the glue got too cold, and it would overflow, pouring liquid glue all over the floor.



At Neville Street where we were located on the second floor, glue actually seeped through the floorboards and dripped down on to the heads of people working below, leading to angry protests from the victims of the accident.

Craft binding was far more interesting. When an order was received for an account or a day book, the correct amount of paper required would be trimmed and sent to the ruling department. After ruling the paper would be folded and hand sewn on wooden frames by women operatives using tapes and strong thread made by Coates of Glasgow. The result was something that could last for hundreds of years. The sewn book was then passed to the bookbinders for a process called 'finishing'. This involved making the boards and the spring back, covering with leather, and applying any gold lettering or tooling required. Sometimes an interesting process called marbling the edges was required. This involved boiling up a concoction of water and a kind of seaweed called Carrageen Moss in a large cauldron. The liquid produced was then transferred to a large wooden trough and various special colours were floated across the jelly like surface in bands. There were different patterns, styles and colours for stationery and printed books. Finally the surface of the liquid was combed along its length to give the marbling effect. The most difficult part of the process came when the trimmed book edge was dipped into the liquid. This had to be done in a certain way with a kind of rolling motion, otherwise blank spaces appeared on the edge and you had to begin all over again.

Unfortunately all this kind of skilled work diminished as technological changes took place and old-style account books went out of fashion. However these traditional methods had their advantages as it was difficult to alter entries on the pages of an account book without the changes being noticed. Even into the nineteen-seventies one of our best jobs was making ruled and printed account books for the Midland Bank.





A REVISED INTERPRETATION FOR THE  
ISOTOPE DATA FROM  
THE MEDIEVAL CEMETERY AT  
RICCALL LANDING

By C. A. Chenery and J. A. Evans

The recent paper by Hall *et al*/2009 is a welcome publication that includes isotope data on tooth enamel from a number of individuals. While the interpretation within the paper is not incorrect, in the time between the production of the data and the publication, some of the samples were re-analysed for oxygen isotope composition, by a more consistent and reliable method, and more strontium isotope data is available for comparative studies. Hence we submit this note to update the dataset and context for the Riccall individuals described in Hall *et al*/2009.

We thus present here, briefly, an updated interpretation of the full isotope dataset for the Riccall individuals (Table 1 and Fig.1). There are a number of considerations when looking at this type of isotope data and most critical is: What would we expect the isotope composition of "locals" to be? This information is being constantly developed and refined.

Sample numbers	Tooth	Sr ppm	<sup>87</sup> Sr/ <sup>86</sup> Sr <sub>n</sub>	δ <sup>18</sup> O <sub>e</sub> ‰	δ <sup>18</sup> O <sub>dw</sub> ‰
1985.11.SK7	P1R	75.4	0.711648	17.75	-6.6
1985.11.SK9	P1L	84.9	0.711261	18.38	-5.3
1985.11.SK15	P1R	77.8	0.710535	18.39	-5.2
1985.11.SK11/SK16	P1R	143.0	0.709988	18.42	-5.2
1985.11.SK18	P1R	87.0	0.710939	18.35	-5.3
1985.11.SK22	P1L	73.9	0.710837	17.81	-6.5
1974-121-SK1	P2L		0.708747	17.00	-8.3
1985-11-SK1	P2L		0.709935	17.70	-6.7
1974-121-SK4	P2R		0.709891	18.38	-5.3
1985-11-SK9	P2L		0.710600	18.27	-5.5
1974-121-SK18	P2R		0.710968	18.18	-5.7
1974-121-SK23	M3R		0.709789	17.53	-7.1

Table 1. Revised data table of strontium (<sup>87</sup>Sr/<sup>86</sup>Sr) and oxygen isotope data (enamel δ<sup>18</sup>O<sub>e</sub> and calculated drinking water δ<sup>18</sup>O<sub>dw</sub>) for samples from Riccall Landing. All oxygen and the six samples, that include strontium concentration values, were analysed at NIGL. Methods and drinking water calculations, using the Levenson *et al* equation and corrected for inter laboratory differences, are described in Chenery *et al* (*in press*) and Evans *et al* 2009.

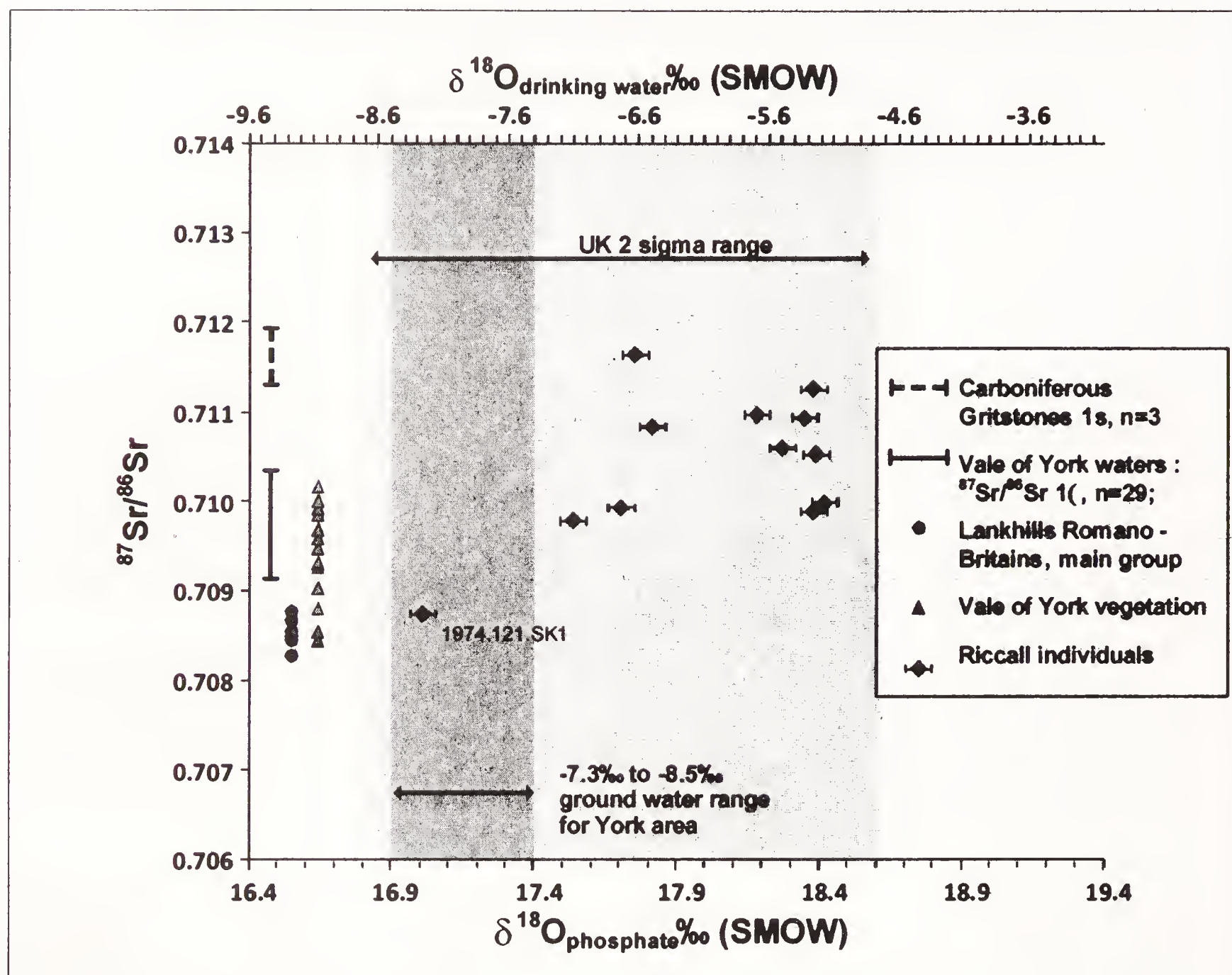


Fig. 1 Plot of revised Riccall strontium and oxygen isotope data with fields for expected  $\delta^{18}\text{O}$  ranges for UK and local drinking water, and expected local  $^{87}\text{Sr}/^{86}\text{Sr}$  biosphere ranges.

Chenery *et al* (in press) provide the best current estimate for the range of oxygen isotope composition for tooth enamel from non-modern UK individuals ( $-8.7\text{‰}$  to  $-4.75\text{‰}$ ). This field is plotted on Figure 1 along with a field for enamel values that equates to drinking water composition for the York / Riccall area of  $\delta^{18}\text{O}_{\text{SMOW}}$  between  $-7.3\text{‰}$  and  $-8.5\text{‰}$  (mean  $-8.0 \pm 0.33\text{‰}$ ,  $1\sigma$ ,  $n=23$ ) (Darling *et al* 2003 and Darling *pers. com.*), which is equivalent to phosphate  $\delta^{18}\text{O}_{\text{SMOW}}$  between  $17.4\text{‰}$  and  $16.9\text{‰}$ .

The village of Riccall, in eastern England, is 13 km south of the city York in terrain founded on Triassic sediments, with the Carboniferous Limestone and Gritstones of the Pennines to the west and the Chalk Wolds to the east. The strontium isotope composition of the biosphere, in this part of Britain, can be constraining by a number of data sets:

1. The mean composition of water from Triassic sediments similar to those found in the Vale of York is  $0.7097 \pm 0.0006$  ( $n=29$ ,  $1\sigma$ ) Spiro *et al* (2001);



2. A survey of  $^{87}\text{Sr}/^{86}\text{Sr}$  in modern plants growing on the major rock types within the Vale of York gives the range of biosphere strontium isotope ratios in the York region as between 0.7084 and 0.7102 with a mean of  $0.7094 \pm 0.0006$  ( $1\sigma$ ,  $n=13$ ) (Leach *et al*, 2009, Chenery *et al*, *forthcoming*);

3. Individuals taken to be raised on Chalk give  $0.7085 \pm 0.0002$  ( $1\sigma$ ,  $n=7$ ) (Evans *et al* 2006) and the most radiogenic nearby lithology, the Pennine, Millstone Grit gives plant values of  $0.7116 \pm 0.0003$  ( $1\sigma$ ,  $n=7$ ) (Evans *et al* accepted).

If the data from Riccall are plotted with reference to these data sets the following observations are possible. The strontium and oxygen values for all of the individuals sampled are compatible with expected bio-accessible and ground water values for Britain and can be subdivided into groups with likely origins around York / Riccall and other regions within the UK. Sample 1974.121.SK1 has a low strontium value within the range of York vegetation and similar to the Chalk dwelling Romano Britons at Lankhills (Evans *et al*, 2006). This person has a low  $\delta^{18}\text{O}_{\text{SMOW}}$ , equating to the "cooler" UK values most typical of eastern central England (including York / Riccall) and eastern Scotland (Darling *et al* 2003). These data are consistent with a Chalk based environment in eastern England and hence consistent with being raised on the Yorkshire Wolds. Sample 1974-121-SK23 plots within the Sr range for York vegetation and Triassic hydrosphere values and has an oxygen value that is a little higher than expected for the York area. These data are compatible with areas of Triassic geology to the north and west of York.

The remaining individuals (10) have strontium values consistent with Triassic and Carboniferous terrains. However their oxygen values suggest origins in milder climate areas than found around York. Three individuals (1985.11.SK7 1985.11.SK22, 1974-121-SK1) have oxygen values compatible with much of western Britain, while the remaining seven represent more extreme western UK values such as found around SW Wales and SW England and the Inner Hebrides (1974-121-SK4, 1985.11.SK11/SK16, 1985.11.SK15, 1985.11.SK18, 1974-121-SK18, 1985.11.SK9, 1985-11-SK9, the last two appear to be analysis of different teeth in the same individual).

## CONCLUSIONS.

The twelve individuals examined in this study are of mixed origins. All of the strontium isotope compositions are consistent with an origin in the York area or not far away in the Chalk Wolds and Pennines. However the oxygen isotope data does split the twelve samples into three groups, Two individuals who have oxygen values close to that expected for the York / Riccall area, three individuals who have drinking water values similar to those predicted for western England ( $-7\text{‰}$  to  $-6\text{‰}$ ) and a group of seven individuals who have a "warmer signal" which equate to drinking values between  $-6\text{‰}$  and  $-5\text{‰}$ .

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## THE YORKSHIRE COUNTRY HOUSE PARTNERSHIP

*By Christopher Ridgway and Allen Warren*

*This Communication provides information about the Yorkshire Country House Partnership, established ten years ago between the University of York and seven Yorkshire country houses. It outlines the achievements so far and plans for the future.*

The year 2009 sees the tenth anniversary of the founding of the Yorkshire Country House Partnership, a pioneering collaborative research venture between the University of York and, originally, seven houses in the region (Brodsworth Hall, Burton Constable, Castle Howard, Harewood House, Lotherton Hall, Nostell Priory, Temple Newsam). The Partnership has now grown to include Cusworth Hall, Fairfax House, Kiplin Hall, and Sewerby Hall, and the university involvement currently encompasses the Departments of History, Archaeology, History of Art, Music, and English and Related Literature, together with support from the University Library and the Borthwick Institute. The Partnership aims to connect academic expertise with curatorial experience, and is committed to the support and encouragement of research into the history of these houses, investigating their architecture, landscapes, families, archives and collections. The Partnership is presently co-chaired by Dr Christopher Ridgway (Curator, Castle Howard) and Dr Allen Warren (Department of History), with administration generously supported by Castle Howard through Alison Brisby (Assistant Curator, Castle Howard). Over the next few years the aim is to extend membership to other country houses in Yorkshire that are open to the public, especially those with a professional curatorial presence.

The Partnership has successfully completed a number of individual and collective research projects with public outcomes and has established a reputation as an example of good practice in interdisciplinary collaborative working, both within the higher education and heritage sectors regionally and nationally. The Partnership has developed close links with English Heritage, the National Trust, the Historic Houses Association, the Attingham Trust, the National Trust for Scotland, and the Institute for Historical Research at the University of London; it has also formed a strong working relationship with the Centre for the Study of Historic Irish Houses and Estates at the National University of Ireland, Maynooth, and established links with the Irish Heritage Trust, the Office of Public Works, and a number of houses in Ireland.

Academic and curatorial members contribute to a module on the country house within an inter-disciplinary MA at York, and the Partnership supports research at PhD level, including three successful awards under the Arts and Humanities Research Council Collaborative Doctoral Award scheme, with two students placed at Castle Howard and one at Harewood House.

The projects the Partnership has engaged in have all been designed to enhance both academic and public understanding. In 2004 the first of a series of simultaneous, interlinked exhibitions was held across the seven houses, investigating the role of women in the Yorkshire Country House. *Maids & Mistresses* attracted support from the Heritage Lottery Fund, which enabled each house to produce a guide for the exhibition, and collectively the seven houses managed to boost their visitor numbers by two per cent that year.<sup>1</sup> The project drew on the research of a PhD student in the History Department, and culminated in both a book of essays and an international conference on *Women and the British Country House*, jointly hosted by the University of York and Castle Howard.<sup>2</sup> Encouraged by the success of this model, a number of houses repeated this formula in 2006 with *The Year of the Portrait*, held in conjunction with the re-launch of Beningbrough Hall, which hosts some of the eighteenth-century picture collection from the National Portrait Gallery. In 2007 five houses, including Sledmere House and Burton Agnes, mounted a further series of exhibitions entitled *Work & Play: Life on the Yorkshire Country Estate*. This project, which also received Heritage Lottery Fund support, led to a conference and publications, and has been extended subsequently through a programme of ongoing research into estate landscapes.

In February 2009 the Partnership hosted at York its third biennial seminar on research, policies and issues, attracting speakers from all the major heritage organisations in the UK, together with speakers from Scotland and Ireland. At this seminar a number of future projects were identified. These included:

*War and the Country House*. This is the next major collaborative venture, which will lead to a series of inter-connected exhibitions and other public outcomes among the member houses in 2011 and beyond. There will also be an international conference in York on the theme *Occupation and Eviction: Conflict and the European Country House in the 20th Century*, which will form part of the programme of Cultural History Conferences supported and sponsored by the History Department. An academic publication and a research project connected with the exhibitions and conference has received declarations of support from English Heritage, with a view to creating an online resource for students interested in this theme. The project has also led to collaboration with the Imperial War Museum and the British Commission for Military History.

*Sculpture and the Yorkshire Country House*. The Partnership is pioneering a joint workshop with the Attingham Trust on sculptural holdings in Yorkshire country houses to be held in 2010; it is also seeking to create an online database of these sculptural holdings. This work has led to discussions with possible additional partners such as the Royal British Society of Sculptors and the Henry Moore Institute.

<sup>1</sup> See *YAJ* 77 (2005), pp.298-300.

<sup>2</sup> This research also led to Dr R. M. Larsen's 'Death becomes her: mourning and commemoration of elite women in Yorkshire, 1720-1860' which won the Yorkshire Essay Prize in 2005, published in *YAJ* 78 (2006), pp.177-95.



*Anglo-Irish Relations: the Case of Yorkshire.* This joint project between the Yorkshire Country House Partnership and the Centre for the Study of Historic Irish Houses and Estates at the National University of Ireland, Maynooth, grew from a scoping exercise in both Yorkshire and Ireland that identified the principal archival resources to support the theme, focusing on families and estates in Yorkshire and Ireland. A PhD student has been appointed at York to work on this topic, and joint research between York and Maynooth will lead to a programme of academic seminars, conferences and publications.

*The Mental World of the Country House.* This project builds on the establishment of a database of the library holdings of the houses (funded by the University of York and the Yorkshire Museums Libraries and Archives Council between 2002 and 2006) and aims to investigate how people in these enclosed communities acquired, absorbed and shared ideas and information. A doctoral student, under the Arts and Humanities Research Council Collaborative Award scheme, will begin work in October 2009 investigating the library of the 3rd Earl of Carlisle, the builder of Castle Howard, and his intellectual milieu.

*The Country House and Travel and Transport.* This is a collaborative project with the National Railway Museum and the Institute of Railway and Transport Studies with the aim of increasing the understanding of the relationship between country houses and the development of travel and transport.

*The Country House and Empire.* Early discussions have begun to formulate a project that investigates the relationship between houses and families and the British Empire, focusing on their collections and archives.

Other doctoral projects supported by the Partnership include: *The Country House and Music*, investigating the role of music (composition and performance) in the Yorkshire country house, 1750-1850. *Crown and People in Yorkshire 1918-1939*, an Arts and Humanities Research Council Collaborative Award secured in association with the Yorkshire Film Archive to support research into images of royalty within Yorkshire. Research based at Castle Howard into *Dynastic Whig Politics in Yorkshire, c.1830-1860, Lord Morpeth and His World*, is also the fruit of another Arts and Humanities Research Council Collaborative Award, and this project will result in an exhibition and seminar to be held at Castle Howard in the autumn of 2009. Similarly a PhD on the estate landscape at Harewood House has also been funded under the Collaborative Award scheme,

At the same time the Partnership is seeking to extend the scope of research into country houses to beyond the traditional remit of the humanities, and in particular to encourage the bio-sciences to investigate the ecology of estates, as well as develop a new understanding of how archival sources can inform environmental research.

Ten years after its formation, the Yorkshire Country House Partnership has grown into a dynamic enterprise that sits at the heart of a reinvigorated debate about the role and meaning of the country house in its broadest understanding. A programme of highly successful seminars, conferences, and exhibitions, together with their allied publications, has been instrumental in refashioning the interpretation of the historic house in the UK and Ireland. At the same time as deepening its research activities amongst its members the Partnership is reaching out to connect with other

interested parties, nationally and internationally. Serious consideration is being given to launching an MA in country house studies at the University of York, as well as establishing a Continuing Professional Development programme for those working in this sector. Furthermore the Partnership, in conjunction with the Centre for the Study of Historic Irish Houses and Estates, has begun a series of conversations in the USA with a view to sharing their range of expertise and knowledge in the form of a major conference, which would aim to re-stimulate interest in this rich and diverse topic in North America, and enable academics and heritage professionals working on both sides of the Atlantic to learn from one another as to how they are addressing issues relating to the interpretation and presentation of the historic house in the twenty-first century.

Further information about Yorkshire Country House Partnership can be found on its website ([www.ychp.org.uk](http://www.ychp.org.uk)), and we welcome enquiries about projects, membership (either full or associate), and possible collaborations. For further details please contact Christopher Ridgway ([cridgway@castlehoward.co.uk](mailto:cridgway@castlehoward.co.uk)) or Allen Warren ([ajw9@york.ac.uk](mailto:ajw9@york.ac.uk)).



# A ROMANESQUE CORBEL AT KILDWICK CHURCH, NORTH YORKSHIRE

*By Rita Wood*

The stone in question has recently been discussed in this journal as an early carved head of pre-Conquest date, and as perhaps representing the face of Odin.<sup>1</sup>

John Billingsley briefly compares the carving to sculpture at Adel near Leeds, but does not follow up this insight, perhaps because his measurements for the stone (45 cm high, 45-52 cm wide) were misleading. The dimensions are not easy to obtain since the stone has been set above the deep recess leading to the west doorway inside the tower, and a curtain pole passes immediately in front of it. The present author's estimate of its height is 17 cm or just under 7 inches; it is approximately square.

The stone is very like corbels at Adel (Fig. 1), but it has been trimmed to show the face only. At the bottom the stone is horizontal and smooth - this probably is the original surface of the block. At the top, the characteristic 'impost' has been carefully cut away to leave the rounded head; before removal of this slice the height would have been consistent with Romanesque building practice - in the first half of the twelfth century courses were commonly about 21 cm high. The sides have each been trimmed some 2-3 cms, removing the cavetto on which the head was centred.

From below and to the side (Fig. 2), the face projects perhaps 7 or 8 cm from the wall. The man is pop-eyed, has a narrow moustache and a mouth formed by one slash of the chisel; it seems that a small chip has been lost below the mouth. The eyes are outlined by a double line, making a shape which is rounded at the nose but pointed at



Fig. 1 Two corbels on the south nave wall at Adel, near Leeds

<sup>1</sup> J. Billingsley, 'An early carved head and Anglo-Danish sculptures at Kildwick church, North Yorkshire', *YA* 80 (2008) pp. 43-50.





Fig. 2 The corbel in the tower at Kildwick

the outer corner. The same features occur in the two corbels at Adel: a man's head with eyes of that shape and outline and a narrow moustache; also an animal head with a distinct flat area on the downward surface. The ornamental corbel-table (above the corbels) at Adel is not likely to have been repeated at Kildwick; and there is no suggestion that the workmen were the same, for the features mentioned are common.

The lop-sidedness, exaggeration or distortion in the face of the Kildwick example is another common feature of corbels. There are such faces at Adel, but these were mostly restored (with gusto), however, original examples survive elsewhere, for example at Birkin. The distortion of the face expresses the surprise or alarm of the man at what he sees coming from the sky: Christ in Judgement.<sup>2</sup> At Adel, the man's expression is restrained and symmetrical, he opens his mouth in amazement or perhaps a smile; the animal head beside him is muzzled to show its evil powers are controlled. The Kildwick corbel was probably discovered and reset during the restoration in 1901-03, when numerous pre-Conquest stones were found in the south wall of the chancel.<sup>3</sup> The corbel may have been found in the fabric of the nave, where the four western bays belonged to the twelfth-century church.

<sup>2</sup> R. Wood, 'The Augustinians and the Romanesque sculpture at Kirkburn church', *East Yorkshire Historian* 4 (2003) pp.14-19, 25.

<sup>3</sup> E. Coatsworth, *Western Yorkshire*, Corpus of Anglo-Saxon Stone Sculpture vol VIII, pp. 178-182, ill. 391-415.



EXCAVATIONS AT BOWES AND LEASE RIGG ROMAN FORTS, By S S FRERE AND R L FITTS, Yorkshire Archaeological Report, 6 (Yorkshire Archaeological Society: Leeds), 2009. pp284 , 89 illus, 1 col. ISBN 978 1 903564 21 9. £12 + p&p

This volume presents reports on excavations on two Roman forts in Yorkshire. It is a slightly curious pairing, as the sites are far distant from each other, Bowes on the important road from York to Carlisle passing over the Stainmore Pass, and Lease Rigg on the North York Moors. The common factor between the sites is that both were co-directed by the late Brian Hartley. The decision to bring the reports together was doubtless influenced by the fact that they are individually too short to be presented as individual monographs, and too long to be accepted as journal articles - a common problem in archaeological publication. The reports are traditional in structure with no pretensions to innovative formats, and this is wholly appropriate to accounts of excavations that took place in the 1960s and '70s.

The Bowes report, by S. S. Frere and Brian Hartley, comprises 55 pages of introduction, structural description and conclusions, and 137 pages of reports on the finds and other material recovered. The accidental loss of detailed drawings of the excavation of the ramparts and intervallum roads was clearly very regrettable though not a total loss, as photographs of the trench survived. The quality and selection of photographs in the report is generally very good, and shows the quality of archaeological survival on the site. Elements of the defences, the *principia*, the *praetorium*, including the plunge bath of the commanding officer's bath-house, and other structures in the *latera praetoriae* were examined. The work established the shape, size and orientation of the fort, the phasing and dating of the structures examined, and the existence of a Flavian annexe to the north and an eastern vicus. Though the scale of the work was relatively limited, its results and conclusions are important, simply because the site was so little known before. The stratigraphic descriptions are fully integrated with the associated dating and finds evidence.

Despite the loss of some evidence, a thread of argument suggesting a Cerialian origin for the Bowes fort is fairly convincing, especially given the dendrochronological date for Carlisle, and the strategic position of Bowes on the Stainmore road. Uncertainty also attends the end of occupation, thought to be late in the fourth century on ceramic evidence despite a lack of very late coinage. The early garrisons are unknown, though finds evidence suggests the Trajanic garrison was equitate. Following occupation by the peditate 4th cohort of Breuci a second equitate cohort, I Thracum occupied the fort by c. 197. The late-third century destruction of the *praetorium* was overlain by bulding debris, and the baths of the later *praetorium* were built. This may well be one of the more elaborate *praetoria* now known from many forts, for example South Shields, Binchester and Piercebridge, and this may be confirmed by the presence of a quantity of painted wall plaster in its destruction debris. A late fourth century building with a western apse in the central range, is of interest in context with the putative churches with western apses now known in contexts of similar date at Housestead, Vindolanda and Birdoswald. The fort vicus continued in occupation to the later fourth century.

The reports on the finds, traditional in format, are all of high quality, being written by a group of very well established specialists, many of whom contributed

their work gratis.

The report on Lease Rigg, by Leon Fitts, deals with work on a fort and extensive annexe. Excavations are described in the annexe, on the fort defences and also in the fort interior. The fort appears to be broadly a Flavian foundation. It had two phases of activity and seems to have been abandoned in the mid-second century. It was long and narrow in plan with a standard suite of internal buildings, the layout of which was adapted to the shape of the fort. The timber slots that were the evidence for buildings were insubstantial. The annexe is an undated addition to the fort. The description of the stratigraphy and structures would have benefited from more photographs, and in parts the cross referencing between trench designations and building identifications, both of which are alphabetic, are confusing. The discussion on garrisoning is bedevilled by uncertainties, and the comment of the possible presence of stables is superseded by the identification of the form of cavalry barracks at Wallsend. The report provides useful detail of what had been termed a 'phantom fort', and has contributed to discussion on the nature of the Roman military sites and roads of north-east Yorkshire, particularly to discussions of the nature and date of the Cawthorn Camps and the status of Wade's causeway.

The publication of these two sites is a valuable addition to knowledge of the Roman military occupation of Yorkshire, and in general terms reminds us of the value and necessity of the publication of excavations which have become regarded as part of the 'backlog'.

Portsmouth

Tony Wilmott

**YORKSHIRE A GAZETTEER OF ANGLO-SAXON AND VIKING SITES.** By GUY POINTS, paperback, 434 pages, 34 black and white photographs and 42 illustrations, paperback edition ISBN No. 978-0-955769-0-6, Rihtspell, 2007, £24.95

The preface in this book lists three objectives: to provide a comprehensive gazetteer of sites in Yorkshire for the Anglo-Saxon Viking period, to provide location and descriptions of what can be seen and to provide background material for the period and its churches in context (p vii). In order to achieve these there is a glossary of terms and a rating system for the gazetteer ranging from one star (difficult to find or identify with confidence) to five stars (easy to find, excellent examples, full of interest). By this time you may have realised we are not just considering seminal monuments (as featured in James Dyer's *Southern England an Archaeological Guide*) but also sculpture within churches, museums and, oddly, those in private ownership without public access. The gazetteer works on a county basis of East, North, South, West Yorkshire and the City of York, starting with a list of sites by the rating category then an alphabetical listing. What is apparent in looking at North Yorkshire as an example where there are 159 sites listed and 131 are churches, is that clearly, we are looking at sculpture within and around churches as the core of the text of this book. Having ascertained the audience for the book there are good descriptions on the road signs



and so forth to find the sites but what is needed is a location map. Indeed the audience for this book may well wish to visit more than one church within a day and so a map to show the location of the sites and to plan a route between churches would be invaluable. What is disappointing to me is that when directed to field monuments such as East Barnby, "archaeologists did find the body of an A-S warrior" (p 137), there is no reference available (Elgee 1930, 106). The lack of references throughout the book is a problem.

A further search of the gazetteer to examine the sites that are classed "museum" finds a comprehensive review of artefacts and exhibitions within each museum. Repeated for each entry is a long caveat about how displays can change over time emphasising the need to check the current exhibition before visiting. This information could have been stated once in the introduction to the gazetteer. As a field archaeologist I find it difficult to comprehend how sculpture removed from its context and displayed in a museum can receive five stars at Leeds City Museum, but West Heslerton settlement and cemetery receives one star. In a similar vein there is no mention of Thwing or Catterick where there are at least three Anglo-Saxon cemeteries, grubenhaus and documentary references to Catraeth, whilst the reconstruction/fabrication of a Viking village at Murton is rated three stars. In summary does the book achieve the objectives in the preface? Only partially I am afraid. It is good in presenting the range of sculpture and stonework at the Christian sites across Yorkshire, but less thorough on the earlier period. The background information to the period and its context (objective three), the story of the kingdoms of Bernicia and Deira merging to form Northumbria, is not covered. What of the crucial conversion period during the seventh century with the growth of monasteries? As a guidebook to the sculpture and museums containing Anglo-Saxon material this book will be useful; but keep your O.S. maps to hand and be aware that you may not find the sites that shaped Saxon Yorkshire between AD 400-700.

York

Stephen J. Sherlock

THE NORTH MANOR AND NORTH-WEST ENCLOSURE. WHARRAM A STUDY OF SETTLEMENT ON THE YORKSHIRE WOLDS, IX. By P. A. RAHTZ AND L. WATTS, York University Archaeological Publications 11 and English Heritage (2004). Pp. xviii. and 426. Illus 197. Price £22. ISBN 0 946722 19 6.

WATER RESOURCES AND THEIR MANAGEMENT. WHARRAM A STUDY OF SETTLEMENT ON THE YORKSHIRE WOLDS, X. By C. TREEN AND M. ATKIN, York University Archaeological Publications 12 and English Heritage (2005). Pp. xii. and 278. Illus 260. Price £22. ISBN 0 904761 72 X.

The appearance of a Wharram Percy publication is of (inter)national as well as of regional importance, and a matter of celebration, although in this case poignant because these volumes record the deaths of the project directors. The North Manor volume includes a series of recollections of John Hurst; and an appreciation of Maurice Beresford will appear in the next Wharram publication.



A Wharram monograph is unlike other excavation reports - not only does it present all the archaeological information for a particular area, but it also considers the results in the context of current thinking about the whole project. In this sense none of the Wharram volumes are 'final' publications, but are part of the continuing and changing hypothesis that made the field project so distinctive and exciting. Often they are 'open ended' because it is not yet possible to reach a final resolution of some issues; hence the volumes contain a variety of interpretations of the same data. To a certain extent this reflects the genesis of the long-term project and the need, for example, to reconcile the different recording systems that were employed over thirty-five years, or the sheer length of time it takes to generate and assimilate the huge number of stratigraphic and specialist reports, or the (late) decision to include other sites in the same publication. But these volumes also demonstrate that a tension often exists over what is an appropriate level of interpretation of the results. Authors wrestle with the relevance their area's results have for the valley or indeed the Wolds region generally or beyond, and this is often related to a maximal or minimal view of the significance of a particular dataset: it also reflects the Wharram ethos of the importance of placing detailed information in context.

The North Manor volume concentrates on the results of the 1976-90 excavation which concentrated on the later prehistoric, Roman and early (my emphasis and see below) Anglo-Saxon periods (xv), but it also incorporates results from the 1950s, 60s and 80s. It is of immense importance for demonstrating the chronological depth that existed in this medieval settlement pattern. A clear methodological interest is also apparent (as might be expected from some sites that were run as a university training excavation): the differing interpretations between the first excavation of Site 13 in 1961 and its re-excavation (and extension) in 1986; the interaction between geophysical (completed by 1984) and earthwork surveys and the excavation results (this will doubtless continue with the release of the more recent surveys); the validity of using small cuttings to enhance the interpretation of the open areas; the use of broad chronological horizons (master periods) to integrate the many cuttings.

Throughout there is a concern to think about the sites in terms of access from and through the valley and onto the plateau, and this is particularly true of the later prehistoric and Roman phases. The later Iron Age/Roman comprised two phases of enclosure linked to a major holloway and regarded as one of the five contemporary farms in the valley. The authors appear to favour two separate phases straddling the Roman conquest, although they acknowledge the ceramics would allow for both phases to be post-AD71 - the latter option preferred by Hilary Cool in her 'overview'. There followed a major change in the orientation of the land divisions, with large quantities of fourth- and fifth-century material and two phases of a drying/malting oven. The authors' preferred maximal interpretation of the data is of a villa, similar to those at nearby Wharram le Street and Wharram Grange; that of Cool is of a modest, utilitarian rural settlement.

The difficulty of relating these results to a wider area is illustrated by the north-west enclosure, less than 100m away, where the occupation was largely confined to the third century AD with an enclosure and cremations - very different from the North Manor sequence.



Whether there was continuous occupation from the late 'Roman' to the 'Anglo-Saxon' periods cannot be established, the arguments depend on how long Roman material culture remained in use and the date of the sunken-featured buildings. Should the SFBs be regarded as roughly contemporary with the other, eighth-century, Wharram SFBs or could they be at least two centuries earlier, thus strengthening the continuity case is an issue that must continue to be debated.

The later Saxon buildings can be seen as either part of the peasant settlement that was destroyed by the later manor (a reverse of the South Manor sequence) or a 'proto manor' which was later recorded in Domesday. An inhumation is used to support the latter view because it could indicate a burial ground attached to a proprietary chapel. It could, however, also signal a field cemetery, a type being increasingly recognised but previously interpreted as later Roman. Yet Cool prefers the Roman date on the basis of the headless chicken and finger ring buried with the corpse.

The medieval sequence is presented in the context of the documentary review, the main points of which are the development of the North Manor consequent to the acquisition of the Chamberlains' property by the Percys in 1254, leading to the abandonment of the South Manor, and the 'floruit' of the residence in the early fourteenth century. The earthworks have been interpreted as a complex of buildings based around courtyards. The excavations demonstrated a 'high status' hall-like structure, with a pit-kiln located in one of the yards. The prolific later medieval pottery (especially jugs) suggests the complex continued to be occupied later than the documentary evidence implies - again an issue that needs further attention in the future.

The rather ungainly title 'Water Resources and their Management' nevertheless accurately reflects the excavated information and the difficulties of its interpretation - for example it is unclear if the watermill was located. This would come as no surprise to anyone who has excavated medieval water systems, but the report is very important in demonstrating the high value of the information that can be obtained and how its recovery could be maximised. The report is refreshingly candid about the difficulties that were encountered and provides much advice to anyone audacious enough to consider doing similar work elsewhere. Those difficulties (later disturbances, excavation seasons that were too short, how waterlogged conditions militate against recognising the stratigraphic sequence and reduce artefact recovery) explains the long gestation of the volume and also the (few) inevitable discrepancies between sections.

The survey of the documentary material and the fieldwork evidence for watermills in the Wharram Percy and Wharram le Street townships serves not only as an important introduction to these excavations, but also gives information about medieval water management relevant to other landscapes. The intermittent nature of the water courses helps us to understand how this resource was used and contested. The Wharram Percy beck, being a more reliable water source, was recognised as an important resource and a minimum of five mills have been identified in the valley. The documentary evidence for friction between owners over disputed claims and the impact of building other mills gives an important insight into how seigneurial rights over water and milling were regarded, and is helped by the archaeological



identification of the mill sites which caused conflict, including the Meaux Abbey mill at its grange and the Montforts' mill upstream. An important lesson is to realise how limited and periodic was the use of these sites - partly because of the intermittent water supply, but also because of periods of inactivity occasioned by reduced milling revenues or changes in ownership or leasing. All this would have caused a considerable, perhaps a disproportionate, amount of work to recommission and maintain such sites.

The excavation, which took place ahead of a display scheme to recreate the Wharram pond, was focussed on the sites of the dams to the south of the church. A broad chronological scheme of three main phases of damming has been proposed - the basis of the phasing is not clear, reflecting the difficult excavation conditions, but it incorporates radiocarbon dates with the fragmented stratification. The first dam included a mound of ash and burnt grain which were probably emptied from an oven and was radiocarbon dated to the late ninth/early tenth century, suggesting a date of between the tenth and twelfth centuries for the first dam. The scant structural evidence for a mill - two post pads and a post hole immediately to the north of the dam - probably indicates a horizontally-wheeled mill, discussed by Martin Watts. The dam was strengthened with wattles (Watts suggests a fish weir) and clay during the next two phases, dated between the later twelfth and thirteenth centuries the documentary evidence supports an abandonment date in the early fourteenth century.

The environmental evidence, admirably synthesised by Wendy Carruthers, is of immense importance for the region, and makes a major contribution to the overall interpretation of the site. The critical evidence to show that the pond was not a permanent feature - it was frequently drained or allowed to go dry - implies that the mill and spillways only operated sporadically and according to demand. As elsewhere, there are major issues which will need future resolution, the most obvious being the extent and location of the nearest woodland. The macrobotanic report on the wattling, for example, demonstrates a mixed, coppiced woodland which is thought to have covered some of the valley sides. The pollen analyses, however, indicate the cleared and treeless nature of the local environment. The faunal evidence was probably derived from middens and tipped into the pond, although there was a high proportion of horse bones and furniture.

The material culture provides an interesting contrast to that from the domestic, residential sites: there is a huge proportion (93%) of jugs, especially for the (post-mill) fourteenth and fifteenth centuries, when compared with the high-status North Manor (61%). There was also a greater variety of sources for this pottery, some of which had not occurred in other Wharram assemblages, for example Brill/Boarstall (Bucks), the Tees valley and the French Saintonge. The jugs were unaccompanied by other 'high status' pottery forms; this and the presence of limescale may imply that jugs were used to collect and store water from the pond, although a caskhead fragment would suggest alternative vessels.

These volumes again emphasise the importance of the Wharram project for the study of medieval settlement and landuse, not least because many aspects will continue to be debated and reconsidered in the light of further work in Yorkshire and beyond.



SHIPTONTHORPE, EAST YORKSHIRE: ARCHAEOLOGICAL STUDIES OF A ROMANO-BRITISH ROADSIDE SETTLEMENT, edited By M MILLETT, Yorkshire Archaeological Report 5, 2006, 339pp, 120 illus, £25 (+p&p)

This is the second volume of the series reporting on work undertaken by Martin Millett with Peter Halkon, and complements the first<sup>1</sup>, a thorough survey of a landscape block around Holme-upon-Spalding Moor.

The volume is divided into what the editor calls a 'series of separate studies grouped by theme'. The first of these 'Part 2, Survey Studies' (Part I is the Introduction) presents the non-invasive work that prefigured excavation, including field-walking, phosphate analysis, geophysics, aerial survey, and aspects of surface-collected artefacts - especially numismatics - of a roadside settlement site which was basically discovered by metal detectorists. The non-invasive work revealed a settlement stretching some 800m along the Roman road. The settlement comprised a series of ditched enclosures, some, but not all used for habitation, others as stock-yards, gardens, and at least one cemetery.

Survey informed the positioning of a series of excavation trenches, described in 'Part 3: The Excavated Sequences. One chapter presents a 'conventional stratigraphic summary of the trenches, two of which were a partial and a complete road section, revealing the phasing of the road, roadside ditches, and associated burials. The largest trench, Trench 3, comprised the excavation of one entire roadside ditched enclosure, including six occupational phases of a series of buildings, together with ditches, burials and a water hole; an area intensively used for over 300 years. The second chapter within this section is an unusual and welcome innovation: an analysis of finds deposition based upon 3D recording, volumetric analysis of excavated material, and context-by-context in- and ex-situ metal detecting. The results of this work should be taken to heart by all excavators - in particular the discovery of the high proportion of finds recovered from horizontal stratigraphy and surface deposits, particularly at the base of the plough zone, as opposed to contained within the fills of cut features. This demonstrates the clear and ever-present danger of over-machining, particularly on sites where examination of the lower plough-zone is not feasible due to commercial pressure. The tentatively identified interpretations of the patterns of deposition recovered require comparison with similarly recovered data from similar classes of site - data which as yet does not exist.

Part 4, called 'Artefact Studies' in the contents is headed 'Research Materials' in text. The former is surely correct, as the latter would also encompass the matter treated in Parts 5 and 6, 'Bone' and 'Environmental Studies' respectively. All of these finds and environmental reports are as well presented and thorough as one would expect from the group of talented, well-known and experienced specialists that the editor has gathered into his team.

The place to turn to in this book for the story of Shiptonthorpe is Part 7 'Studies in Interpretation'. These exemplary chapters synthesise both local and wider perspectives of the site and its place in the Romano-British landscape. The argument that the road post-dated the military annexation of the region, and that the settlement then grew up alongside the road rather informally is persuasive. The arguments on the character of the site, activities that took place there and (particularly) the reconstruction of buildings, including both early circular structures and a later



aisled hall of several phases, is of great use in comparison with other small roadside settlements all over the British provinces, while the archaeology of the water-hole and of the burials reflects religious observance and tradition on a small and local scale.

The editor stresses that the volume is a collection of themed studies and contrasts this to a conventional archaeological report. This reviewer rather missed this point, largely because the structure of the chapters are in content and ordering exactly what one might wish from a good and thorough archaeological report of traditional type. It does not really matter what one calls the volume - collected studies or excavation report, it does represent a comprehensive account of the data from a small, but methodologically innovative and exemplarily conducted research excavation. It is, in short exactly the kind of high quality local study which the editor sees in his epilogue as an essential building block towards a greater knowledge of the complexity and variability of the cultures which come together as the Roman Empire.

<sup>1</sup> Halkon, P. and Millett, M., 1999, *Rural settlement and industry: studies in the Iron Age and Roman Archaeology of Lowland East Yorkshire*, Yorkshire Archaeological Report 4

Portsmouth

Tony Wilmott

THE MEDIEVAL PARK: NEW PERSPECTIVES. Edited by ROBERT LIDDIARD. Windgather Press, Macclesfield, 2007. 256 pages, 69 illus, 35 in colour. ISBN-13: 978-1-905119-16-5. £25 (paperback).

This attractively produced collection of essays brings together authors from a variety of sub-disciplines to provide a snap-shot of research related to medieval parkland. I use the term cautiously as the authors make clear that there is no real consensus about the correct term – hunting park, deer park, park – for the medieval word 'parcus'. This is more than semantics as a number of the contributors draw attention not only to the myriad ways in which these landscapes were exploited as grazing land, as mineral reserves, as woodlands, but also to the perception of these enclosed areas as playgrounds for the elite practising aspects of the hunt which were closely wrapped up in chivalric ideology.

The book is split into two parts – the first dealing with conceptual issues, the second made up of case studies. S. A. Miles on starts off with the 'sociology of park creation' - discussing the relationship between social status and park ownership or creation. Amanda Richardson follows this, professing 'a landscape approach' to parks associated with royal palaces, and with Clarendon palace in particular. The final three chapters of the first part engage with the faunal and floral evidence with Naomi Sykes discussing animal bones, Aleksander Pluskowski on medieval ecosystems, and Ian Rotherham on the conservation issues found within former medieval parkland today. These three, I suspect will be the most welcome additions to the more traditional canon of works on parks. Sykes, for example, suggests that the increasing representation of different species of deer after the Conquest is indicative of changing practices of hunting that effectively saw the re-invention of the park in the High Medieval period. Pluskowski argues for a more integrated approach to all the elements that made up both the physical and cultural park landscape, whilst Rotherham



takes an overview of the ecology of the park and includes a review of deadwood, perhaps one of the more neglected aspects of park ecosystems.

The second section is devoted to case studies. Stephen Moorhouse draws on his extensive work in West Yorkshire and the Yorkshire Dales, and a careful reading of the documents and the landscape. By the author's own admission it is an edited version of a much longer piece, and such is the extent of the area covered and the topics included that it would be equally at home in the first half of the book. The chapter covers a huge range of topics from the nature of park pales to the importance of riverside meadows, woodland place names, warrens, gardens and kennels, as well as ironworking, coal mining and stone quarrying. In contrast Anne Rowe and Rosemary Hoppitt explore the chronological and geographical development of parks in Hertfordshire and Suffolk respectively, both concluding that most were situated on high interfluvies away from prime arable land. Angus Winchester's chapter on the upland county of Cumbria provides a nice contrast and adopts an approach closer to Moorhouse, taking care to accentuate the tenurial landscape into which parks were placed.

This collection succeeds in demonstrating the vitality of work being done in this area and suggests new directions for research from a variety of perspectives. It succeeds in bringing together authors whose scope cannot fail to stimulate ideas and discussion.

York

Jonathan Finch

**SHEFFIELD TROUBLEMAKERS. REBELS AND RADICALS IN SHEFFIELD HISTORY.** By DAVID PRICE. Phillimore, Chichester, 2008. Pp. xiv + 178. Price: £16.99. ISBN 978 1 860 77569 7.

This book celebrates the history of a succession of remarkable individuals and groups, connected in varying ways to the city of Sheffield, who have challenged the political and social status quo over the last two hundred years. The author collectively refers to these individuals and groups as 'troublemakers', a carefully chosen title (taken from A. J. P. Taylor's 1956 Ford Lectures), as not all of the cast would have described themselves as radical –even if they may have been described as such by others. Price does not explicitly define radicalism, which is odd given that his main purpose is 'to trace Sheffield's radical tradition' (p. xiii) from the time of the French Revolution through to the fall of the 'People's Republic of South Yorkshire' in the 1980s. It is clear, however, that Price adopts a broad definition, sufficiently broad enough to incorporate not only radical Nonconformists, such as the Rev. Joseph Evans, Chartists like the young and tragic insurgent Samuel Holberry and the idiosyncratic Isaac Ironside (curiously referred to as 'Ironstone' on p. 46 and p. 51), but also socialists as diverse as Edward Carpenter and the Anglo-Catholic Vicar of Darnell, Alan Ecclestone (a communist).

Just how far the beliefs and actions of such a diverse group of troublemakers amounted to a discernible radical tradition, specific to that period, is not entirely clear. One is certainly struck by some of the continuities in Sheffield radicalism, notably the recurring campaign for public access to space, whether in the form of opposition

to enclosure in the 1790s and free access to the countryside in the twentieth century, or the right to hold meetings in and around the city. But more evidence is needed of just how conscious radicals and rebels were of this tradition, and of how they drew on, and adapted, that tradition to their own ends. As Clyde Binfield suggests in his foreword, if such a tradition existed, it clearly had its origins in the two hundred years *before* the French Revolution of 1789. Price cites three sources of Sheffield's radicalism: nonconformity, the cutlery trades and trades unionism—two of which had their origins in the seventeenth century. Price attributes the decline of this radical tradition to the fact that these sources 'no longer carry great influence' in the city.

Price has amassed a colourful cast of Sheffield rebels and radicals whose concerns were anything but parochial and insular, in terms of either their intellectual formation or the campaigns they waged. After all, this was a tradition that included such luminaries as John Ruskin and Edward Carpenter. As Price notes in the epilogue, it is lamentable that Sheffield appears to have forgotten much of its radical past. It is to be hoped that *Sheffield Troublemakers* will lead to a rediscovery and wider celebration of that past.

Sheffield

Matthew Roberts

THE NATURE OF THE WORLD. THE YORKSHIRE PHILOSOPHICAL SOCIETY 1822-2000. By DAVID RUBINSTEIN. Quacks Books, York, 2009. Pp. ix + 139. 29 illustrations (7 in colour). £15.95. ISBN 978-1904446187.

The Yorkshire Philosophical Society was formed in 1822 in the wave of enthusiasm which followed the discovery of the bones of extinct animals in Kirkdale Cave, Kirkbymoorside, the previous year. Despite the possible challenge that such discoveries were making to conventional views of the Bible and the arguments of the Natural Theologians in proof of the existence of God, clergymen were among the foremost founders of the society. Though the YPS was by no means the first such provincial society, it was one of the earliest to place its emphasis on science rather than literary and scientific, or utilitarian industrial topics. This approach was enhanced by the acquisition from the Crown of the Manor Shore, including the ruins of St Mary's abbey and parts of St Leonard's hospital, next to which they created a garden and built a fine museum in the classical style of ancient Greece. With the patronage of the great and the good of Yorkshire under the presidency of William Vernon, son of the archbishop of York, the society expressed the vibrant, modern, outward-looking civic culture of the capital of the North in the early nineteenth century. Its sciences were of the gentlemanly kind: palaeontology, geology, archaeology, botany, all great inspirations for the avid amateur collector whose donations soon flooded into the museum from places far beyond Yorkshire but also from the important Roman and medieval archaeological sites literally in the Society's own front garden. The national importance of the new Society was emphasised when it played a leading part in the formation in York of the British Association for the Promotion of Science in 1831.

The history of this society in changing times and under pressure from the mounting



cost of maintaining and displaying its collections amid changing fashions, a gradual decline in its traditional county and clergy support, and the rise of professionalism and specialisation in science, are charted in eight chapters that bring the story up to the end of the twentieth century. For anyone who has been involved in running a voluntary society, the reading will be sadly familiar: the constant struggle to manage threateningly large deficits with a stagnant or declining income, the tension between ambitions and means, the battle to staunch the loss of members and if possible to increase their numbers; the quest for the right people to volunteer to work for nothing and the right employees to do the impossible for little pay. Tribute is given to the many who did bear the burden over the years to bring the society through good and bad times. There was also the battle between the aims of the Society and many of its members, who seem to have cherished more their privilege to walk in the museum gardens than to contribute to scientific study or use the museum's much-praised collections; and there was a continuing tension between the YPS as a private gentlemen's club and the aspirations of the general public, bringing with them into the gardens on open days the age-old problems of youthful vandalism and litter louts. Yet survive the YPS did, thanks to dedicated hard work by several individual officials and to a legacy left by Dr Tempest Anderson in 1913. It was not until 1961 that the Society reluctantly accepted that an amateur body such as theirs could not realistically hope to finance a museum to modern standards and so handed the gardens, the museum and all their contents over to York City Council. Dr Rubinstein does not disguise the friction which existed between the YPS and the local authority, as control was switched by local government reorganisation from York City to North Yorkshire and back to the City of York but at the end of his history he is able to look forward to the less intrusive control now established by the York Museums and Gardens Trust. Meanwhile the Society, free from the burdens of what were once its main characteristics, has been able to re-invent itself as an educational body to promote science more generally, through making occasional grants and holding annual courses of lectures on broadly scientific themes.

Amid so many recurring issues, Dr Rubinstein does well to sustain his narrative without repetition. He has a keen eye for longer-term trends, in scientific culture and changing cultural elites, from county gentlemen, clergy and doctors to university professors and doctors of a different kind. Above all he is keen to comment on the attitude of this male elite towards women, their reluctant and belated admission of the latter to the Society, and the equal (and sometimes majority) role played by women in more recent times. The history of the Society is thereby made a case study in those important changes that have reshaped English society and attitudes towards science since 1822. This is primarily a history of an institution and the people who helped it thrive and survive. It is not a history of the museum or its collections – this was written in 1988 by Barbara Pyrah – but it is perhaps a pity that no comment is made on the architectural (as opposed to botanical) importance of the museum gardens, about which relatively little is said other than their cost; or the way in which their recent development to accommodate the general public, now let in at will during the hours of daylight, has begun to undermine the essence of their historic layout as much as their plant collections. The book concludes that, as

throughout most of its history, the future of the YPS must lie in the hands of its members, and it is to be hoped that this excellent study will inspire them and the people of Yorkshire to cherish this ancient county society for many decades to come.

York

Edward Royle

WEST RIDING HEARTH TAX ASSESSMENT LADY DAY 1672. Edited by DAVID HEY, COLUM GILES, MARGARET SPUFFORD AND ANDREW WAREHAM. Hearth Tax series vol. 5. The British Record Society, London, 2007. Pp xiv + 730. 19 plates, 6 figs. 5 tables. 18 maps. Price: £60.00. ISBN 978 0901505484

One of the most important record publishing exercises currently in operation is the British Academy Hearth Tax Project, the volume under review being the fifth to be published as an ongoing collaboration between the Project and the British Record Society. Between 1662 and 1689 the hearth tax constituted a vital element in the restored Stuart regime's fiscal strategy. It was an attempt to tap the wealth of the nation by assuming that the more fireplaces a house contained, the more wealthy its owner was likely to be. Accordingly, within individual parishes householders were named and the number of hearths their residences possessed recorded (including, in the West Riding, two instances of heated dog kennels), with the poor or those living in properties worth less than twenty shillings a year in rent being exempt. What the copious surviving records for this unpopular and not outstandingly efficient tax provide for the modern historian are insights into local social and economic structures, while the listings of names also provide information for family historians. The Hearth Tax has long been familiar, and has indeed been much used, as a historical source. But the current series of publications sets new standards in the extent and accuracy of the information being made available.

The volume contains a full listing of returns by wapentake and parish, and these are also presented statistically. There is a full personal names index (of 40,000 entries) eighteen maps detailing such matters as the distribution of households with differing numbers of hearths throughout the Riding, and numerous other figures and tables which make the outcome of the analysis of the taxation records very accessible. The work is also illustrated with a number of plates. Overall, the British Record Society is to be congratulated for having produced such a handsome volume.

The intellectual quality of the commentaries on the records and their uses offered here is of a correspondingly high quality. David Hey provides a characteristically erudite and effective overview of the West Riding in the late seventeenth century, while Colum Giles mobilises his considerable expertise to write on wealth distribution, the hearth tax and housing. In particular, he demonstrates how even by the late-seventeenth century wealth in the West Riding was beginning to be concentrated in what were later to be recognised as industrial areas. Elizabeth Parkinson's short essay on the administration of the hearth tax leads the reader through the vicissitudes of how the collection of the tax was organised and implemented. A



section on wealth and poverty in six counties, drawing on analyses of hearth tax records so far completed, demonstrates how the findings from the hearth tax records of an individual county might be set in context. The West Riding, on the basis of its hearth tax returns, was less wealthy than some southern shires, but was wealthier than Westmorland and County Durham, above all on the basis of the proportion of residences taxed on only one hearth. There are also very useful sections on surviving West Riding hearth tax documents, and on the vexed issue of exemption, as well as a brief general introduction on the Hearth Tax Project by Margaret Spufford.

The problems involved in using this source (notably those arising from evasion and the issue of exemptions) are fully discussed, but it remains clear that hearth tax records constitute a historical source of prime importance, and that this volume will establish itself as a major research aid for historians of the West Riding.

York

James Sharpe

MR. MERCURY. THE LIFE OF EDWARD BAINES, 1774-1848, By DAVID THORNTON. Merton Priory Press, Chesterfield, 2009. Pp. viii + 339. ISBN-13: 978-1898937746. £30.00.

A biography of a leading newspaper figure who was a prominent MP and advocate of reforming causes, this work has much to recommend it. It draws on archival sources from a good range of holdings and also shows a mastery of printed material and of the secondary literature. The *Leeds Mercury* was Baines's base and it is instructive to consider the links between his journalism and his politics. The call for moral policing and improvement reflected social pressures in Yorkshire and elsewhere, for newspapers such as the *Leeds Mercury*, *Leeds Intelligencer* and *Sheffield Advertiser* criticized such popular pastimes as bull-baiting, cock-fighting, drunkenness and profanity. Alternative values were ignored; the virtuous had to unite to convert or compel the reprobate, and the culture of print was to advance the cause. Thus, under Baines, the *Leeds Mercury* was an exponent of a secular evangelicalism that complemented the religious variety. The *Leeds Mercury* was loyalist in the 1790s, although in 1801 it moved under Baines's ownership towards the Whig camp. Most of those who funded his acquisition of the paper were Dissenters. In 1812, Brougham told Leigh Hunt that the press was the real opposition to Lord Liverpool's Tory government, and in the provinces Baines led the demand for peace. In the post-war world, Baines gave the longstanding call for moral improvement a pointedly political content and energy. In 1830, he used the paper to promote Brougham's successful candidacy for the key seat of Yorkshire. Yet, like the *Manchester Guardian*, Baines, while critical of what he saw as the Establishment and of institutionalised abuses, and while an active supporter of the Anti-Corn Law League, was far less critical of the play of entrepreneurial capital and the new world it was creating.

This is an instructive and thoughtful biography of value to Yorkshire and newspaper historians and, more generally, to those working on British history in the period.

University of Exeter

Jeremy Black



WHO BUILT BEVERLEY MINSTER? Edited By P.S. BARNWELL and ARNOLD PACEY. Pp. 164, 23 colour & 35 b/w illustrations. Salisbury: Spire Books, 2008. £14.95. ISBN 978 1 904965 17 6

Beverley Minster has good claim to be, together with Westminster Abbey, one of the two finest surviving English medieval churches other than cathedrals. For long much too little-known outside Yorkshire, it has at last begun to attract the serious published studies which it deserves, largely thanks to the initiative of the Friends of Beverley Minster. In 2000 they published *Beverley Minster: an Illustrated History* under the expert editorship of Dr Rosemary Horrox. She was ably assisted by Dr Paul Barnwell, who had already surveyed the Minster's roofs for the Royal Commission on Historical Monuments on behalf of the Friends. Paul Barnwell has since gone on to explore other aspects of the building, and he has now joined forces with Arnold Pacey to edit a new volume which, though published by Spire Books, has been funded by the Friends. It originated with a Study Day which they sponsored in March 2007, and has been published, commendably, only thirteen months later.

After an editorial introduction, four chapters follow on the medieval Minster and four more on later periods. Jennifer Alexander provides a masterly background on masons' marks, with illuminating comparisons from Lincoln, Southwell and Carlisle, after which John Phillips applies the techniques to Beverley; both mark a great advance in the study of these often misunderstood symbols. Alison Armstrong and David Cant similarly study the carpentry marks of the nave roof, and Arnold Pacey considers the late medieval craftsmen of the Minster and their organisation. A necessarily short chapter by the editors looks at the limited building works of the sixteenth and seventeenth centuries, and a longer one by Dr Barnwell surveys the craftsmen and women (a large proportion were women) of the major eighteenth-century restoration. Barnwell then studies, with Geoff Brandwood, the Victorian and Edwardian architects and craftsmen, and in a fascinating epilogue Ian Stewart, the current Minster architect, considers those involved in restoration, repair and new projects since the 1970s.

The volume is, as the editors say, 'a reflection of the current state of research'. In some areas the picture is as complete as we are ever likely to have, as with the eighteenth-century restoration, but in other respects there is more to do, both with documents (as on the major re-ordering of the 1820s) and on the fabric. Naturally there is much more information on the craftsmen and women of the last three centuries than on the middle ages, but the analyses of masons' and carpenters' marks have been very fruitful. Phillips points out that he has so far been able to record masons' marks up to a height of about 4.5 m (15 ft), but they survive in huge numbers on visible surfaces. He is able to tabulate hundreds of marks to demonstrate a contrast between five or six leading masons whose work appears throughout the nave, and a much larger body employed at peak times (28 different men worked on one pier). Equally interestingly, Armstrong and Cant are able to identify three different sequences of numbering by carpenters in the main nave roof, two groups working on the eastern and middle sections around the 1340s and a third further west in or after 1388. All the evidence concurs with a completion of the main fabric



around 1400, and not in the fifteenth century as used to be believed.

Altogether this is a fine survey with wide implications: it has not only new evidence on the Minster itself, but examples of new methodology of relevance to greater medieval churches in general, and to their restoration and repair in post-medieval centuries. It makes one grateful that such a magnificent building escaped destruction, narrowly, twice - once in the 1540s, when it might have been demolished had the town not bought it back (at one remove) from the Crown at the dissolution of secular colleges in 1548, and again when one transept almost fell after 1700, nearly triggering a general collapse. As a bonus, the book is fully illustrated with photographs, plans and elevations, well referenced and indexed, beautifully printed, and almost wholly free of misprints.

Somerset

D. M. Palliser

**QUAKER EXTENSION c.1905-1930: THE YORKSHIRE 1905 COMMITTEE.** By MARK FREEMAN. Borthwick Paper, 112. York, 2008. 42 pages. ISSN: 0524-0913. ISB-13: 978-1-904497-23-3. £4.00 + £1.00 p&p.

This interesting paper assesses the work, usefulness and success of the Yorkshire 1905 Committee within the wider framework of Quaker Extension work in this period. The work of the Committee in Yorkshire was very varied and included adult education, summer schools, ministerial initiatives and other activities which fell into the category of 'Quaker extension'. The Committee was formed in response to both internal and external pressures on the Society of Friends, in a period of social, economic and political upheaval when a generation of young, liberal leaders came to the fore resulting in a more liberal version of Quakerism. As a consequence of these changes, Friends increasingly became involved in political and social activities beyond the confines of the Society, including the rise of the Adult School movement.

Responding to complaints which echo the concerns of the 1780's, young Friends, including John Wilhelm Rowntree, realised that there were Meetings within the Yorkshire Quarterly Meeting which lacked leadership and good ministry. Many of these Meetings found their membership amongst the working-classes and it was felt that the lack of education amongst members resulted in poor leadership, crude ministry and a lack of vitality. Whilst there was a recognition that changes needed to be made to improve the quality of the Meeting, there was a fundamental dilemma for the Committee: how to improve the quality of ministry without 'training' the ministers. As the author points out, the main obstacle to any attempts to improve the ministry was the necessity to retain the Friends' core belief in a spontaneous, lay ministry. Any attempts to formalise the ministry would be totally unacceptable to Friends.

Whilst various initiatives were put in place, including the revival of the travelling ministry through organised 'tramps' - walks to outlying Meetings - it was through the provision of education for the working-classes that The Yorkshire 1905 Committee had its greatest successes, although, as the author points out, it is doubtful whether in fact they achieved their express aim of improving leadership and Ministry through the improved education of their own members. It was through the extension system

that the Committee contributed greatly to the provision of education for the working-classes. This was especially true of the work of the Adult School movement and the establishment of settlements such as Swarthmore in Leeds and Woodbrooke in Birmingham.

This study provides an insight into the working of one Committee of the Society of Friends in Yorkshire in a period of great change and its response to the challenges posed both internally and externally by these changes. It is a valuable addition to our understanding of the problems facing the Society both internally and externally in this period and will be of interest to anyone researching Quakerism or adult educational provision in Yorkshire in this period.

Burton Leonard

Sheila Wright

ARCHAEOLOGY OF THE A1 (M) DARRINGTON TO DISHFORTH DBFO ROAD SCHEME. Lancaster Imprints 12, 2007. F Brown, C Howard-Davies, M Brennand, A Boyle, T Evans, S O'Connor, A Spence, R Heawood and A Lupton. 30.3 x 21.7 cm. Pp xxiv and 452 (+ CD). Figs. 195 many in colour (+ 163 on CD), Plates 56 many in colour (+ 80 on CD). Tables 70 (+71 on CD). Oxford Archaeology North. £25. ISBN-13: 978-0-904220-39-1

This well-produced volume presents the evidence from the investigation of 58km of road corridor and associated off-line works undertaken between 2003 and 2006 between Ferrybridge and Hook Moor and Wetherby to Walshford undertaken by Oxford Archaeology North. As such it serves to compliment the publication *Ferrybridge Henge: The ritual landscape* (I Roberts (ed), 2005, Yorkshire Archaeology 10) which reported work in the area of the Holmfield interchange. Overall the project methodology followed what is now a well-worn track of desk-based assessment, geophysical survey, fieldwalking, trial trenching and mitigation excavation. The key sites investigated included Iron Age settlements east of Pontefract and at Ledsham, part of a medieval village at Cowthorpe (Site 16, Wetherby Lane) and the unexpected discoveries of an early Bronze Age archer and an Iron Age warrior buried with a cart or 'chariot' at Ferry Fyston.

The essential approach of the volume is a chronological examination of the landscape transacted by the project with chapters on: 'The Early Prehistoric Landscape', 'Iron Age and Romano-British Landscape' and 'Medieval and Later Landscape' forming the core of the descriptive elements of the volume, albeit with an interpolated chapter on 'Site D (Ferry Fyston) in the Iron Age and Romano-British Periods' focussing on the 'Pexton Moor-type' (*ie* interred upright, rather than dismantled) chariot burial and the subsequent use of the square barrow within which it was interred as a focus for later, Roman-period ritual activity, primarily represented by the remains of at least 162 cattle deposited in the barrow ditch. The quality of the excavation and the deployment of the latest analytical techniques mean that the report gives us much new and useful data relating to one of the few chariot



burials to have been excavated under modern conditions and what results may be argued to be a model of reporting.

The finds and environmental material are dealt with in three substantial chapters with important and useful reports by many leading specialists, but these sections of the report give rise to one quibble, or perhaps more accurately point to what may be a missed opportunity. While the reports make clear where the material under consideration is from, nowhere is there a tabulation that allows stratigraphic assemblages from contexts or features to be easily reconstructed - a context listing on the CD, with finds and environmental material noted, would have been useful.

However, despite that one query, there is no question that this is an important report, not simply for the chariot burial and associated activity, but for the chronological and literal slice that it opens up through the landscape of Yorkshire. It adds to the corpus of 'minor rural sites' that are emerging into the glare of publication as a result of well-managed and adequately resourced linear schemes. For too long rural archaeology concentrated on known sites, but we are now at last beginning to see those sites as part of a complex multi-period landscape.

The volume makes considerable use of colour for both photographs and maps/plans to the general benefit of the volume. The figures are uniformly clear and the photographs well-chosen. The CD that supports the printed volume provides a further 200+ pages of detailed catalogues of finds, scientific analyses and technical reports on the conservation of the chariot burial and represents a valuable additional resource for specialists and other researchers.

Oxford Archaeology North have set the bar high, I can only hope that other organisations are challenged and inspired to try and better what is undoubtedly a very worthwhile and important report.

Weaverthorpe

Pete Wilson

**NOTIFICATION OF PUBLICATION**

**A GREAT CONVINCEMENT: THE STORY OF THE QUAKERS OF NORTH EAST YORKSHIRE.** By MONICA P. VENTRESS. Whitby, 2008. 109 pages. £9.95 + 75p. p&p. Available from the author, Brookside, Littlebeck, Whitby, YO22 5HA.

This booklet describes in great detail the lives and activities of Friends in the North East of Yorkshire from the beginnings of Quakerism up to more recent times. It has a useful index of members and an appendix listing tithes paid by members of the various Meetings. It will no doubt be of interest to the membership of the Meetings in the area covered.

**EIGHT CENTURIES OF MILLING IN NORTH EAST YORKSHIRE.** By JOHN K. HARRISON. North York Moors National Park Authority (2001); new edition 2008. Pages xvi + 295. ISBN: 978-1-904622-17-8. £20.00.

This book surveys sites, buildings and machinery concerned with grain milling in north east Yorkshire. The selected geographical area is centred on the North York Moors and bounded by the Derwent to the south, Cod Beck to the west, and the Tees to the north, with additional cover of windmills on the north bank of the Tees. The book contains measured drawings, photographs etc of about one hundred mills in the region; a text which traces the geographical and economic background and the history of milling from 1086 to the end of the nineteenth century; and a gazetteer containing historical references for over one hundred and fifty water mill and seventy windmill sites and, where relevant, a description of surviving remains. This second edition includes major revisions relating to eighteenth-century developments, coastal trading windmills, and millwrights and milling equipment.



**DR DEREK LINSTRUM**  
**(1925-2009)**

We regret to record the death in June 2009 of Dr. Derek Linstrum, the distinguished historian of the architecture of Yorkshire (and elsewhere), a life member of the Yorkshire Archaeological Society who served on its Council during the early 1970's, and a long-time member of the Thoresby Society.

Born and bred in Leeds, Derek Linstrum qualified as an architect and joined the staff of the West Riding County Architect's Department. There, amongst other projects, he was responsible for designing the conversion of Bretton Hall, an architecturally distinguished building, into a college for training in music and drama. In recognition of his work, which was much admired, the college made him an honorary fellow. His developing interest in architectural history subsequently led to an academic career with a lectureship at Leeds School of Architecture. That move enabled him to exercise his considerable skill as a writer and to undertake serious research. He produced a splendid book on the historic architecture Jeffrey Wyatt (later Sir Jeffry Wyatville) a thesis for which he received the degree of Ph.D. at the University of Leeds, and which was very promptly published.

In 1971, Linstrum was appointed Radcliffe Lecturer at the Institute of Advanced Architectural Studies in the University of York, charged with setting up a postgraduate course on architectural conservation. That course, and its director, achieved international recognition, earning for Dr. Linstrum repeated invitations to lecture and to provide advice in many parts of the world. He continued to publish articles in collaborative volumes, journals, and the Press on architectural subjects, and among the honours which he received were the Presidency of the Society of Architectural Historians, a fellowship of the Society of Antiquarians, and the Hoffman Wood Visiting Professor of Architecture at the University of Leeds.

Amidst his professional academic duties and his national and international advisory work, Derek Linstrum always maintained his local connections – he continued to live in Roundhay – and extended his work on Yorkshire's buildings and their architectural history. A founder of Leeds Civic Trust, he also served as Chairman of the York Minster Fabric Advisory Committee, and of the Yorkshire Committee for the European Architectural Heritage Year, 1975.

Moreover, Linstrum's work on Yorkshire's building heritage included two highly successful and much used volumes: *West Yorkshire's Architects and Architecture* (1978) and *Towers and Colonnades: the Architecture of Cuthbert Brodeur* (1988). He gave lucid, finely crafted lectures to many audiences in the county, and was an accomplished guide for excursions: a visit to Wentworth Woodhouse, for example, with Derek Linstrum was a memorable experience.

In addition to his many publications and lectures, however, Derek Linstrum has a particular claim on the gratitude, admiration and respect of members of the YAS: it was he, as a professional architect, who was responsible for the conversion in 1968 of Claremont from a nursing home into the headquarters for the Society, the Thoresby Society, and (initially) the Civic Trust, for its refurbishment and decoration in a style

appropriate to learned conservation and educational societies. In a real sense, therefore (if in a minor key compared with the county's grandest buildings), one can say for Dr Derek Linstrum 'Si monumentum requiris, circumspice'.

G.C.F.Forster Senior Past-President

**MAISIE MORTON**  
**(9 OCTOBER 1922 - 23 JUNE 2009)**

For almost forty years Maisie Morton played a vital part in the Yorkshire Archaeological Society's day-to-day activities, starting as an Honorary Assistant Librarian in 1970 and continuing until the very day she was struck down by illness in May 2007.

Maisie Morton (nee Collinson) was one of the small band of volunteers recruited by Archivist and Librarian David Michelmores to help run the library after its move in 1968 to Claremont from Park Place. Born and brought up in Leeds, she had a deep interest in Yorkshire history and great zeal for encouraging interest and involvement in others. Maisie was a 'people person'. She loved her family (husband Arthur, children Andrew and Jan and grandsons Joe and Luke) above all things, but she also cared deeply about other people, especially children. Her new great-grandson, Seth, was one of the few joys to brighten her final two years, but earlier in her life she had looked after children on a regular basis, a task for which she had a natural talent.

This interest in people and families led to her being one of the founders, in 1973, of the YAS Family History and Population Studies Section, bringing a new kind of member and broadening access to the Society, which had previously tended more to the academic style. Maisie was the first Honorary Secretary of the Section and later its Chairman, and she saw it take off and flourish. The Section recognised her unique contribution by making her its Life President in 1991. But she was also devoted to the YAS as a whole, and a determined defender of its interests. When in 1976 West Yorkshire County Record Office agreed with the Society to take over the running of the YAS archives, Maisie successfully applied for the post of clerical assistant to the new Archivist-in-charge, so that, as she said, she could keep an eye on what was happening. This could not have been a happier arrangement, as Maisie's encyclopaedic knowledge of all things to do with Yorkshire, from the pronunciation of 'Bubwith' to the propriety of eating Wensleydale cheese with fruit cake, proved invaluable to a youthful southerner. Maisie soon had a band of loyal volunteers helping in the archives, taking some of the burden of family history enquiries, carrying out listing projects and generally helping on a regular basis. Many of those volunteers are still giving their support today, but Maisie was the kingpin around whom everyone revolved.

On her husband's retirement in 1982 Maisie gave up her post, but continued as a volunteer, and was made an honorary life member of YAS in 1983. However, much to her satisfaction, in 1989 she was reappointed as Archive Assistant for a further pe-



riod of ten months, retiring finally in 1990. The word 'retirement' hardly describes what happened next, as the Society continued to rely on her to look after the archives on a regular basis, and she was still doing so, travelling from her new home at Keighley, until illness overtook her.

Maisie also served on the Yorkshire Parish Register Section Committee from 1988 to 2000. She was always willing to help out with research and indexing. Between 1984 and 2007 she was responsible for indexing a number of parish register volumes, including Kirk Deighton, Sheffield Volume 8, which with typical cheerfulness she took on at short notice, all three volumes of Giggleswick (she was taken ill with the last volume not quite completed) and Volume 4 of Birstall. Giggleswick 3 and Birstall 4 were the two largest volumes the section has published. Each needed two full shoeboxes of index cards, all carefully handwritten by Maisie, to contain the various indexes.

The debt which the Yorkshire Archaeological Society owes Maisie Morton is immense. She always saw herself as an 'ordinary person', and encouraged other 'ordinary people' to become part of the Society. Yet she is irreplaceable and inimitable. Self-effacing yet also strong and steadfast in her beliefs, she was a person of shining integrity and of enormous intelligence who, with today's opportunities, would have made her mark in some profession. As it turned out, it is our good fortune that she made her mark in the YAS. Her family, the Society and the world are poorer without her.

Sylvia Thomas Vice-President

Note: I am grateful to Maisie's family, and to Pauline Litton, for help with this appreciation.

### **MISS MARIE HARTLEY (1905-2006)**

By the death of Miss Marie Hartley on 10 May 2006 in her 101st year, Yorkshire lost one of the most notable and accomplished contributors to our knowledge of its history. Marie Hartley was born in Morley where her father ran the family textile firm; she attended school there before going on to Ackworth School until 1922. Thereafter, she joined art classes given by the artist Owen Bowen, studied at Leeds School of Art, later took up wood engraving and then continued her art training at the Slade School in London. Returning to Yorkshire, she continued her painting and also her drawing in watercolours and pen-and-ink. During the 1920s her parents had moved to Wetherby and there she met Ella Pontefract, who became a writer of short stories and newspaper articles. In 1932, Miss Hartley and Miss Pontefract began their most fruitful collaboration as artist and author with an illustrated series of articles for the Yorkshire Weekly News on the county's churches, subsequently republished in book form. Thus began a productive partnership in observation, investigation, writing, and illustration which lasted until Ella Pontefract's death at the age of 51 in 1945. Before that they had bought a derelict cottage in

Askrigg, restored it and written a book about the undertaking (Yorkshire Cottage). They had also served as voluntary officers in the ambulance service at Wetherby during the Second World War; it was in those surroundings that they met Miss Joan Ingilby, and the three became friends. Joan Ingilby (a member of the Ingilby family of Ripley) was already a published poet who enjoyed writing, and in 1947 she joined Marie Hartley at Askrigg, thus establishing a purposeful collaboration which lasted until her death in 2000. By then their achievements had been recognised by the award of the MBE, honorary degrees from the Universities of Leeds and York and from the Open University, together with the Silver Medal of the Yorkshire Archaeological Society.

Marie Hartley, first with Ella Pontefract and then with Joan Ingilby, spent some seventy years gathering and recording material about rural life and tradition, places and people. At the core of the series of fine books which resulted is the topography of the Yorkshire Dales, carefully, sensitively described and evocatively illustrated. If many of the books are about the landscape, however, they are more than that: they are landscapes filled with people. They include farmers and farm servants, hedgers, bakers, leadminers, millers, masons, gamekeepers and a host of other craftsmen and tradesmen, men and women in occupations to be found in market towns and rural villages until very recent times. They also describe home life, sports and pastimes, the thoughts and attitudes of ordinary people; they present case-studies of the everyday.

During the 1930s, Marie Hartley and Ella Pontefract produced three pioneering books, on Swaledale, Wensleydale and Wharfedale respectively, all with the same themes - landscape, buildings, economy and work, local customs and history - and all with charming, but appropriate, illustrations. Other topographical works followed, to be equally well received. Another activity, begun with Ella Pontefract and continued with Joan Ingilby, was the investigation of rural crafts and the detailed examination of the tools, machines and other artefacts associated with them. The fruits of that work were two-fold: the rescue and preservation of an astonishing collection of bygoners, which now forms the core of the Dales Countryside Museum at Hawes; and a series of highly regarded volumes beginning with a splendid study of hand-knitting in the Dales, and including three large books, well illustrated, on life and tradition in the Dales, the Moorlands, and the textile districts of the West Riding. These notable and informative works were preceded by a fine history of Askrigg and complemented by interesting and enjoyable collections of historical vignettes of people and places, such as *Dales Memories* and *A Dales Heritage*. Once described as 'life stories from documents and folk memories', these individual studies combine to build a sense of continuity and change in local life. In common with the perceptively chosen historical photographs, with explanatory annotations, published in *A Dales Album* and *Yorkshire Album*, they further understanding of significant topographical and social themes and present a timely record of a vanishing way of life.

Marie Hartley and her collaborators produced some thirty enjoyable, informative books for general readers and specialists alike (her last publications were issued when she was in her nineties). They are works of lasting value, firmly based on primary as well as secondary sources and oral testimonies, and on enterprising



fieldwork; the material is presented in restrained and refined writing, suffused with a lively sense of time and place. In their delightful memoir, *Fifty Years in the Yorkshire Dales* (which includes a list of their publications up to 1995), Marie Hartley and Joan Ingilby reveal clearly their working methods, businesslike approach, quiet determination, and enthusiastic industry.

Marie Hartley herself combined considerable skills as an investigator, artist, photographer, and writer. A serious-minded person with a strong sense of purpose, she nevertheless readily saw the funny side of things and was good company and a charming hostess for her many friends. She was also generous to other writers in related fields and always tried to answer helpfully the many enquiries she received. She quietly enjoyed the public recognition accorded to her, including the several exhibitions of the books, wood engraving, and drawings, for one of which, at the University Gallery Leeds in 1994, a survey and appreciation of the three writers' work, *A Favoured Land: Yorkshire in Text and Image*, was published. Marie Hartley frequently expressed warm appreciation of the Yorkshire Archaeological Society's work and collections, she valued her connection with it, and she was particularly delighted by the award in 1993 of the Society's Medal for 'Distinguished Contributions to the Study of Yorkshire's Past' to Joan Ingilby and herself: she wrote that 'the honour crowned our careers'. To the YAS she bequeathed a collection of her papers, photographs, and other materials, her final service as an eminent, indeed pre-eminent, 'literary ambassador' for the Yorkshire countryside.

G.C.F. FORSTER     Senior Past-President

### **VIVIEN SWAN, BA, DLitt, FSA**

**1943-2009**

Vivien Grace Swan (nee Bishop): expert on Roman pottery and military supply systems (born 12 January 1943; died 1 January 2009, aged 66).

Vivien Swan was an internationally acknowledged expert in the study of Roman pottery. Early retirement from the Royal Commission on the Historical Monuments of England allowed her the time to make a series of studies, particularly in northern Britain and on the Lower Danube, which revolutionised our understanding of the significance of ceramics in establishing ethnic identity and origins and in working out how military supply systems operated. This work established her international reputation.

Vivien Bishop was born in London, but adopted, in her words, by an elderly couple, living in Penarth. She was educated locally and then read archaeology at Cardiff. In December 1965 she was appointed an investigator at the Royal Commission on the Historical Monuments of England, being one of the first women to take up such an appointment in any of the Royal Commissions. Much of her earlier career was spent in the office in Salisbury but in 1975 she moved to York, settling with her family (she had married Tony Swan in 1966) at Flaxton, where she became the church

organist and formed the Flaxton Music Consort. While in York, she published, with Humphrey Welfare, *Roman Camps in England: the field archaeology* (1995), still the indispensable source of information on this peculiarly British archaeological phenomenon.

She already had an interest in Roman pottery, and that was underlined by the publication of *The Pottery Kilns of Roman Britain* (1984). This will remain for the foreseeable future the foundation of Roman pottery-production studies in Britain. The main text is supported by details on microfiche of every kiln in Britain and its products, an enormous scholarly resource. Following her retirement in October 1996, Swan consciously picked up the mantle of her friend and mentor, the Roman-British pottery expert John Gillam, who had died in 1986, and turned her undivided attention to the study of Roman pottery.

The first flowering of her career after she left the Royal Commission is represented by her identification of North African ceramic styles in Britain. A parallel discovery was that a series of pots modelled in the form of human heads which were made in York had North African antecedents and portrayed members of the Severan imperial family. Her work on this pottery and its implications was explored in a series of articles published in the 1990s.

The last of the series, "The Twentieth Legion and the history of the Antonine Wall reconsidered" (*Proceedings of the Society of Antiquaries of Scotland*, 1999), goes far beyond the usual scope of specialist studies and has led to renewed and continuing interest and discussion about the building history and occupation of the Antonine Wall, the most northerly frontier of the Roman empire. In particular, Swan was able to suggest that the building of the Antonine Wall took far longer than previously believed and to offer a context for this: a hiatus of about four years while soldiers from the army of Britain were dispatched to north Africa to participate in the war against the Moors, returning with new styles of cooking which she was able to recognise at various forts along the frontier. Her research led to the award of an honorary doctorate by the University of Wales in 2001 and helped underpin the successful nomination of the Antonine Wall as a World Heritage Site in July 2008.

As her knowledge grew, Swan was able to recognise vessels from the same workshops on different sites and offer percipient comments on troop movements within Britain. She widened her report on the Roman fort at Carlisle to take into account local production, looking holistically at the development of Roman trade and production in Carlisle and the surrounding area.

In 1998 breast cancer was diagnosed. While still recovering from surgery, Swan took part in Andrew Poulter's project on the late Roman and early Byzantine fort at Dichin in Bulgaria, where she worked as Chief Ceramicist from 1998 to 2001 and subsequently as a Research Fellow of Nottingham University preparing the pottery for the publication. In a remarkably short time, Swan produced the first chronology for pottery on the Lower Danube for the period covering the transition from the Late Roman to Byzantine periods (c. AD 400-600). She was also able to trace the changing nature of the garrison through the different vessels used for eating and drinking. As one foreign archaeologist put it, "no one is doing work like this on the continent". More recently, she was involved with the development of Roman-period



ceramic studies and the mentoring of scholars in Georgia.

Vivien Swan was an active member of the Study Group for Roman Pottery, an interest group for amateurs and professionals, from its inception in 1971. She was involved in the formalisation of the group in 1985 and then served as its first president until 1990. Swan did more for the group than any other single member and has been on the committee in varying capacities almost continuously. She also played an important role in the ongoing success of the *Journal of Roman Pottery Studies*, since its first volume in 1986, initially as a member of the Editorial Committee and as Reviews Editor until her resignation in March 2008. Additionally, she was an active participant at almost every annual conference and organised six of them.

She also played a prominent part in the development of the *Rei Cretariae Romanae Fautores*, an international society dedicated to the study of Roman ceramics, latterly serving as a trustee of the society and helping to establish a bursary for foreign participants. Since the late 1990s she was co-convenor of the Roman Northern Frontiers Seminar, reviving an important forum for the exchange of information and ideas.

Specialists in artefact studies are often forced by circumstances to limit the dissemination of their work to a small audience, but from the 1990s Swan demonstrated how such studies are central to a better understanding of much wider archaeological issues. From very early in her career she was concerned with promoting pottery studies as widely possible, publishing the popular general account *Pottery in Roman Britain* in 1975 and updating it in two subsequent editions. Through the Study Group for Roman Pottery and the *Fautores* Swan mentored younger pottery specialists. More generally, she encouraged younger scholars, even when their interests were not specifically in Roman ceramics.

Two years ago cancer returned. Vivien continued to work, with great courage and fortitude, on the *Dichin* and *Carlisle* pottery to within days of her death and completed these two important studies. In November, she was able to attend the British Archaeological Awards ceremony in the British Museum where she received a Lifetime Achievement Award.

Vivien Swan was a larger-than-life figure, unusually for archaeologists wearing colourful designer clothes (her coffin was painted white and with garlands, peacocks and shoes), and contributing generously to archaeological discussions. Rigorous in her own treatment of the sources, she expected the same from all other scholars and could be trenchant in her comments when this did not occur. While some colleagues were at first unwilling to accept her radical views on Roman pottery, she died knowing that she had won the respect of her colleagues in Britain and abroad and that a collection of her papers on Roman pottery, Ethnicity, Conquest and Recruitment is about to be published by the *Journal of Roman Archaeology*.\*

David Breeze, FSA,

First published in *The Independent* on 26 February 2009 (republished by permission).

\* - Since published as *Ethnicity, Conquest and Recruitment: Two case studies from the northern military provinces*, *Journal of Roman Archaeology Supplementary Series* 72.

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